2014

Ascending Higher: The Story of Aviation at Western

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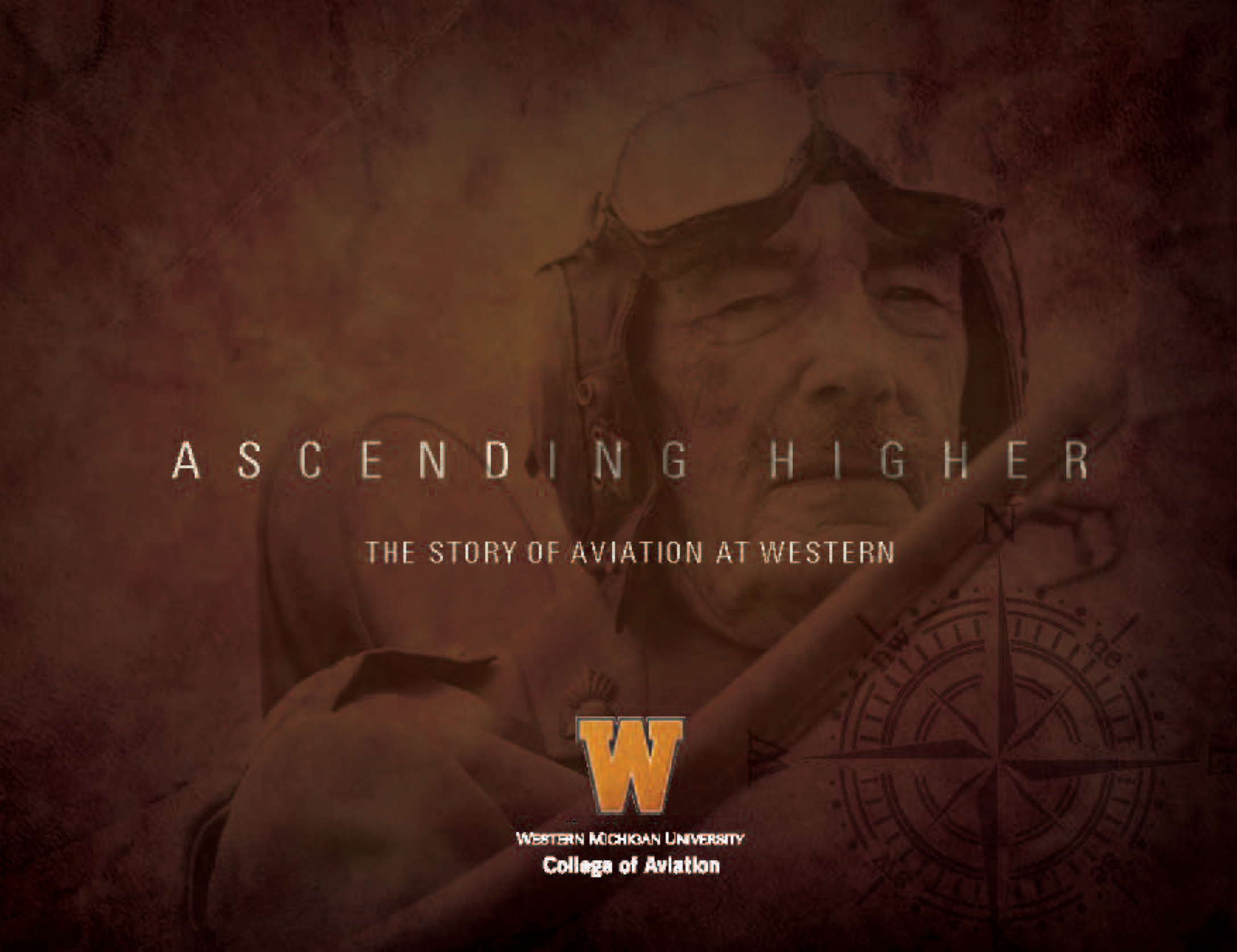

ASCENDING HIGHER

THE STORY OF AVIATION AT WESTERN

WESTERN MICHIGAN UNIVERSITY
College of Aviation


N54SJ

CELEBRATING 75 YEARS

1939 – 2014

WESTERN MICHIGAN UNIVERSITY

College of Aviation


N54SJ
College of Aviation
CIRRUS

75 YEARS OF ASCENDING EVER HIGHER

It was a warm fall day—rare for November—when Josh Blain took the yokes of a Cirrus SR 20 for his first solo flight. As he guided the Cirrus toward the horizon, Blain, a Western Michigan University freshman, followed the contrails of thousands of aviation students before him. Students who took to the skies with dreams bigger than the expansive horizon. Dreams whose reality began in September of 1939 at what was then Western State Teachers College.

Today, the Western Michigan University College of Aviation celebrates 75 years of aviation education. From those modest beginnings in 1939, our curriculum has expanded to offer degrees in aviation flight science, aviation management and operations, and aviation maintenance technology. We currently have a fleet of advanced training aircraft, modern facilities in Battle Creek and more than 740 undergraduate students in the program.

But today, with this book, we take a look back. We celebrate the visionaries of the past who helped us realize our current successes. We commemorate the events and advancements in our storied aviation program. And like young Josh Blain on his first solo flight, we look to the bright future that lies before us.

Cirrus SR20, a mainstay in WMU's training program.

Isn’t it astonishing that all these secrets have been preserved for so many years just so we could discover them!

ORVILLE WRIGHT

75 YEAR ANNIVERSARY
STEERING COMMITTEE

Dace Copeland, *Chair*
Beth Beaudin-Seiler
Joshua Blain
Spencer Gillette
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Tracey Kauppila
Matthew Knight
Glen (Pat) Langworthy
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TABLE OF CONTENTS

The College of Aviation offers the only comprehensive aviation program at a public university in Michigan. And, with more than 740 undergraduate students, is one of the largest aviation programs in the nation. Backed by 75 years of history and our industry reputation, the College of Aviation is a powerful force in the future of aviation training.

The College of Aviation's vision is to establish and maintain state-of-the-art, world-class professional aviation programs that are among the best in the world. We are examining the very ways we teach and pioneering revolutionary new methods of instruction designed to improve a pilot's ability to fly and to work efficiently with a crew. The College of Aviation produces graduates who think critically, communicate effectively, and participate meaningfully and ethically in the dynamic field of aviation.

MISSION

To prepare leaders who are sought after by the aerospace industry, and engage in meaningful research that advances the knowledge base.

VISION

The College of Aviation will be recognized as the premiere aerospace education and research institution in our diverse global society.

CORE VALUES

SAFETY	INTEGRITY	RESPECT
EXCELLENCE	ACCOUNTABILITY	DIVERSITY


N54SJ

Aviation is proof that, given the will,
we have the capacity to achieve the impossible.

EDDIE RICKENBACKER

American Fighter Ace, World War I

MESSAGE FROM THE DEAN

Dear Friends,

Seventy-five years of aviation education at Western Michigan University, my how time flies! From our humble beginnings training maintenance professionals starting in 1939, to steady enrollment, program growth, and state-of-the-art training equipment presently, and now looking toward the horizon to a bright future, this celebration of our history is crucial to our ability to continue to Go West and Ascend Higher.

The WMU College of Aviation celebrates this milestone because of the many educators who share some of the same characteristics as inventors and aviation pioneers Orville and Wilbur Wright. One cannot help but wonder if "Buck" Weaver could have ever imagined that his determination to develop the maintenance training program where he could share his knowledge through an eagerness to teach, and his perseverance to see the program to fruition, would guide us through to celebrating our diamond anniversary some 75 years later. In taking time to review our rich history, it is apparent through every generation since "Buck," there have been distinguished faculty and alumni, visionary leaders, and those alike who have helped guide our students and develop our programs over the years, touching thousands of lives along the way. We are honored to be able to recognize and celebrate their contributions throughout our college hallways and in our commemorative brochure.

As we look to Ascend Higher, the WMU College of Aviation will continue to offer unique and enriching scenario-based education programs in professional flight, aviation management and operations, and aviation maintenance technology to meet the needs of the diverse and global aviation industry. It is exciting to consider what aviation might look like in another 75 years with lighter composite fuselages, engine design improvements and research, and sustainable alternative fuels.

Thank you for your interest in the WMU College of Aviation and for joining us to celebrate during our 75th year. Please visit us often and on our website. We look forward to sharing with you our future accomplishments.

Best regards,

CAPTAIN DAVE POWELL, *Dean*

The Wright Flyer was the first successful heavier-than-air powered aircraft, designed and built by Wilbur and Orville Wright. These innovators took to the sky 36 years before another momentous aviation event. [1903]

AFTER 75 YEARS, THE SKY IS STILL THE LIMIT FOR WESTERN AVIATION

The same year that the future Western Michigan University was chartered, Wilbur and Orville Wright demonstrated how people could be like the birds in the sky. That was 1903.

Some 36 years after the bike-building brothers from Dayton put Kitty Hawk on the map and the planet was on the brink of a second world war in the century, Western created a program to complement a growing industry that was shrinking the earth.

Marking its 75th anniversary, what is now the Western Michigan University College of Aviation has evolved into playing a global role for fostering an awesome force of economic growth, for providing a mode of efficient transportation, and for being a beacon showing the way toward exciting career paths.

This was not exactly the panoramic vision that existed back in 1939 when Western's Department of Aviation Mechanics was spun out of the college's program in the industrial arts.

But even before that, the Kalamazoo community, like the rest of the nation, was becoming infatuated by the prospects of defying gravity.

In September 1910, famed pioneer auto racer, Barney Oldfield, competed in Kalamazoo at the same time a daredevil pilot named Eugene Ely thrilled 8,000 onlookers with his flying skills in a Curtiss biplane. Unplanned was a breath-stealing descent caused when a wire leading to the rudder snapped.

In that crowd was Ely's wife who was striving to become the nation's first female pilot. She also watched her husband's repaired plane win a five-mile "race" against several "motorcars."

GENESIS

If he had been a Kalamazooan at the time, a lad named Elmer C. "Buck" Weaver probably would have been in that crowd. Raised in Ada, Ohio, Weaver would grow up to be the George Washington of Western as the Father of Aviation Training and Education.

By his teen years, he was living in Kalamazoo and attending Kalamazoo Central High School. A shop teacher quickly realized Weaver was something of a mechanical whiz kid because the youth was among the first he had ever seen wearing a wrist watch.

But that was nothing. Weaver came to school one day aboard a wind wagon on bicycle wheels, powered by a motorcycle engine and pushed forward by an airplane propeller. The brakes were his feet dragging against the pavement. He kept himself in shoes via a job that paid 10 cents an hour.

With his graduation from Western State Normal School in 1917, Weaver was hired as a metal-work instructor by his alma mater. When the United States entered World War I, he enlisted in the military in hopes that he would someday be piloting an American version of the British Sopwith Camel in aerial duels against the Bloody Red Baron of Germany.

That would never happen because his vision precluded him from flying for Uncle Sam, but his sight was good enough to spot and remove the mechanical gremlins that kept planes on the ground while he served at bases in Texas and New York.

With the Armistice, Weaver returned to his teaching duties at Western and continued his still-simmering interest in aviation, even buying a share in a 100-horsepower Standard J-1 that was once owned by an adventurer who followed in Charles Lindbergh's footsteps as the second solo flyer of the Atlantic.

After being refurbished by Weaver, the Standard J-1 was berthed at a "spacious" landing field destined to be named for the international flying hero in 1927. After several metamorphoses, that "field" is now the Kalamazoo/Battle Creek International Airport.

By then, Weaver, who added to his educational portfolio with a bachelor's degree from Columbia University, was taking to the skies himself on a regular basis, earning his pilot's credentials in late 1927. He was eventually licensed to carry passengers.

According to one pilot colleague, Weaver was something of an oxymoron when it came to flying, saying that Weaver "was a very nervous sort of guy in an airplane. He was petrified when flying, but he loved to build planes."

While the newly named Western State Teachers College was not in the aviation business per se, Weaver still had his head in the clouds despite his perceived "fears." He wanted his students to have the same sensation, forming the Western Michigan Gliding Club in 1929. Weaver would once say that "no flight in an airplane ever compared with this thriller in a primary glider."

Proving he was right, by late summer 1930, the club's sole glider had sustained enough "minor accidents," sagging the fabric and warping the wood frame, that it was given a Vikings funeral after the metal fittings and wires were removed. The time to proceed to "real aviation" was dawning with the new decade at Western.

Weaver's machine-shop classes had absorbed "aeronautical" topics as he nailed a Master's diploma from Columbia University to his office wall in the mid-1930s. Training-wise, he had his feet on the ground as well, heading Western's program to produce driver-training instructors. It was the first of its kind in Michigan outside of Detroit.

Weaver's mechanical genius galvanized again, as he modified the college-owned vehicles to allow dual controls. In later years, when Western entered the flight-instruction era, his dual-control intuition would become extremely productive.

A sign of things on the horizon was Weaver's launching of a program for teaching aviation mechanics within Western's Department of Industrial Arts in 1937.

The College of Aviation marks 1939 as its official birth year when the Michigan Board of Education authorized a two-year, non-degree curriculum in vocational aviation mechanics with Weaver as the prime instructor. That was linked to the newly formed federal government's Civilian Pilot Training Program.

Thus, under Weaver's eagle eye, Western could now provide the manpower to keep planes air-ready on the ground through the training of licensed airplane, engine and factory mechanics, and produce, through its federally sponsored "ground" school, the pilots to safely fly them.

E.C. (Buck) Weaver's Aircraft Engine class in the lower basement of the Oakland Gym. [1939]

The vocational aspect—the technology of flight—was the only one of its kind in Michigan and one of the few in the country at the time. The pilot-training phase was one of 18 such programs in the United States.

The flight training was operated through the Civil Aeronautics Administration (CAA). The mission was obvious—not only to promote civilian flying for a budding enterprise but to also create a pool of trained pilots "in case there was a need because war was on the horizon."

ON THE BRINK OF WAR

Top: Four Western women qualified for the first flight training. [1939]

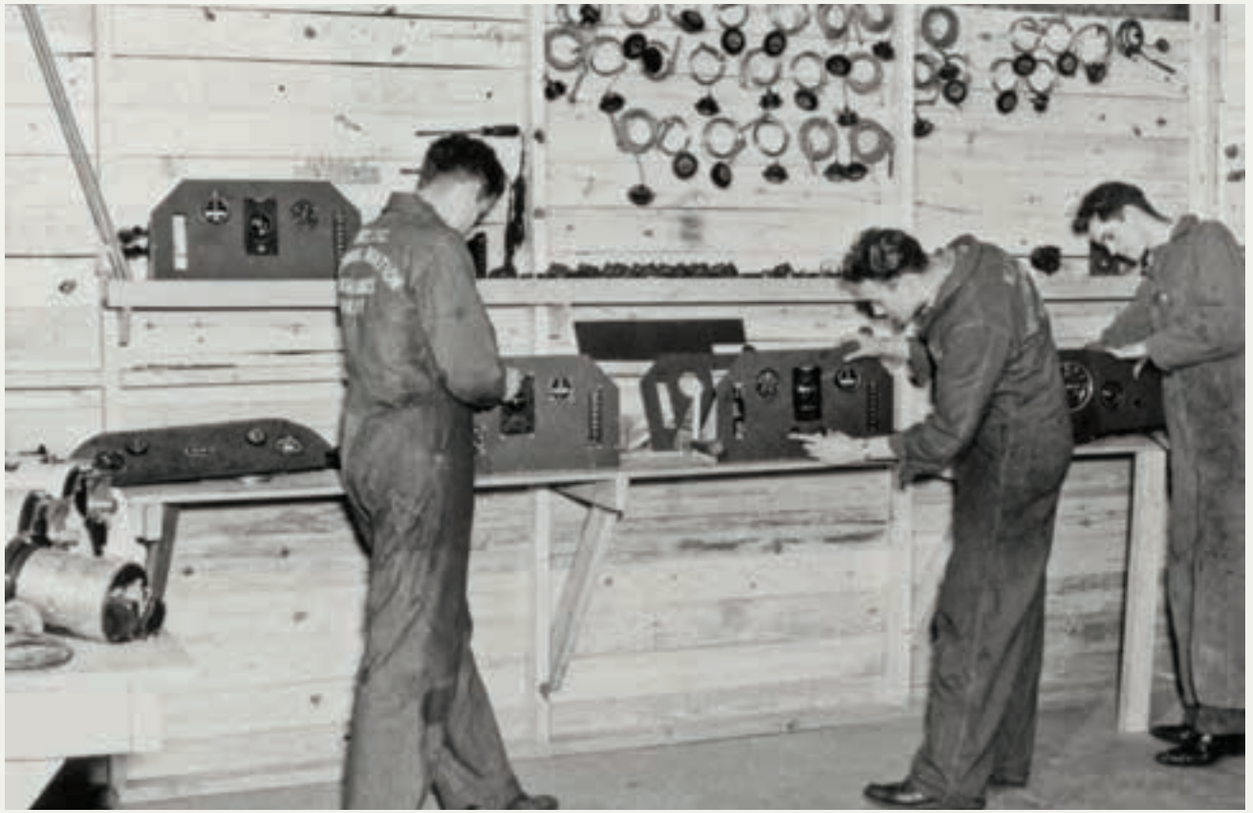
Left: Repairing the Taylor E2 Cub, Waldo Stadium in background. [1940]

Across the country, 10,000 students signed up for the expanding CAA program at 437 colleges and universities. The number at Western for the fall of 1939 was 59. The fee for flight training at Lindbergh Field or the nearby Austin Lake airport was $30 per semester.

Enrollees had to be between the ages of 18 and 25 and be able to pass a physical exam based on Army Air Corps standards. To qualify for CAA training, males had to be between 64 and 74 inches in height without shoes and weigh between 115 and 200. The parameters for women were 62 to 74 inches "without shoes" and 100 to 200 pounds "without clothes."

Four of the 59 were females, which sparked this headline in the Western Herald student newspaper— "Weaker Sex Qualifies for Aviation." Followed by these words — "The weaker sex of Western State Teachers College have taken a step to prove that they aren't the weaker sex and should be placed on a par with men."

"Four Western coeds braved the most rigid of physical exams demanded by the CAA Flight School to gain admittance and pass them. . . So, now boys, you're going to get women drivers up there too."



Aircraft Instrument class in basement of the Oakland Gym. [1939-1940]

Following the 50-hour portion of ground-school training, the enrollees were divided into groups of 10 for their 35 to 50 hours of flight instruction. The first to go up for instruction was one of the women—Norma Luneke of Grand Rapids.

In January of 1940, 26 students who had completed 17 hours of solo flight were presented their "wings" by Weaver at a dinner-dance in Walwood Hall. Among them were Luneke, Pauline Stein of Kalamazoo (the first female to solo) and Dorothy Johnson of Delton. Dennis Traynor, the first student to solo, later became a Western flight instructor.

Commented Weaver: "Women students are apt pupils. They seem to take to flying as easily as driving a car."

By the fall of 1940, the two-part Western program had started its pattern of having a full quota of 60 future-pilot enrollees—along with a waiting list—and the 35 students needed to fill out the aviation-mechanics courses.

In one news article about the mechanics program, the journalist wrote: "Those who fly the airplanes always get the glory and praise, either by flying the wrong way (a reference to Wrong Way Douglas Corrigan's infamous aerial misadventure in 1938 when he flew from Brooklyn to Ireland while his flight plan called for a return to Long Beach, Calif.) or by being a famous first. But their success is entirely dependent upon the men who design the ships and build them strong and sturdy." Seventy-five years later, that hasn't changed.

Engine test cell in the aviation building. Ken Royce engine from a low wing Aeronca LC (mounted) and a Jacobs L5 from a Fleetwing Amphibian on floor. [1942]

New Mechanical Trades Building on WMU campus just east of the Stadium. Usually called the Aviation Building. [1941]

Blueprint reading class.
[1942]

With the war drums beating, the male enrollees in Western's CAA program were asked to pledge themselves to enlist in the Army or Navy air forces in the name of national defense. Advanced flying courses were added to what was already available for the male trainees. While African Americans eventually were given the opportunity to show their aerial talents via the Tuskegee Airmen, "women in combat" was taboo as World War II neared.

Much of Weaver's teaching resources—skeletons of airplanes, motors, wings, wheels and other key components needed to make these miraculous machines fly—had been out of sight in a room in the basement of the men's gym on Oakland Drive.

That was until the fall of 1941, when the newly christened Western Michigan College of Education opened its two-level Mechanical Trades Building nearby, thanks to a $57,000 gift from what is now the W. E. Upjohn Institute for Employment Research.

The project took the aviation program out of the shadows for the general public who rarely frequented an airport or stepped inside a hangar. In view regularly outside in the building's open spaces were fuselages, wings, engine parts, and the students who were learning by working on and trouble-shooting these components. Continued growth soon packed the new facility with training activities, causing a spillover back into the previous spaces.

Night classes were added for employed men who were looking for a new career path in a growing industry. They served the out-of-work folks who were being assisted by President Roosevelt's Work Projects Administration, the largest New Deal initiative conceived to beat back the Depression. Jobs were readily available at airplane-engine factories in Chicago, Detroit and South Bend.

Before Pearl Harbor, 14 CAA pilots from Western had already moved on to Army and Navy air training. Some were assigned to Randolph Field in Texas, called "The West Point of the Air," where they were exposed to night flying, aerial acrobatics akin to what would be called "dogfights," and 450-horsepower planes over a 30-week period.

Ensigns with the V-5 program in front of a Meyers OYW just south of the main hanger, Kalamazoo Airport.
Top Left: E.C. Weaver, Coordinator; Top Right: Clement Peters, Operator of Western Michigan Flying Service; Lower Right: Kermit Weid, instructors.

WESTERN AND THE WAR

With the smoke still rising from the devastated Pacific fleet in Hawaii, the CAA program shifted gears. All pilot training would be directed toward the war effort.

Commented one local official: "On December 7, 1941, the nation took its worst beating in history. Remember December 8. That's the day the United States began to fight back."

Weaver was in charge of Western's response, which by October of 1942 included an expansion of facilities and runways at the Kalamazoo Municipal Airport to allow for the training of as many as 200 pilots, plus more aviation technicians there and back on campus. The Austin Lake field, the school's previous main base of operations, remained in use.

A month after Pearl Harbor, Western signed an agreement with the federal government to host what was called the Navy's V-5 program in which men 20 to 27 with two years of college to their credit could be trained as pilots and commissioned as ensigns. It became one of 580 similar institutions in the country to do so.

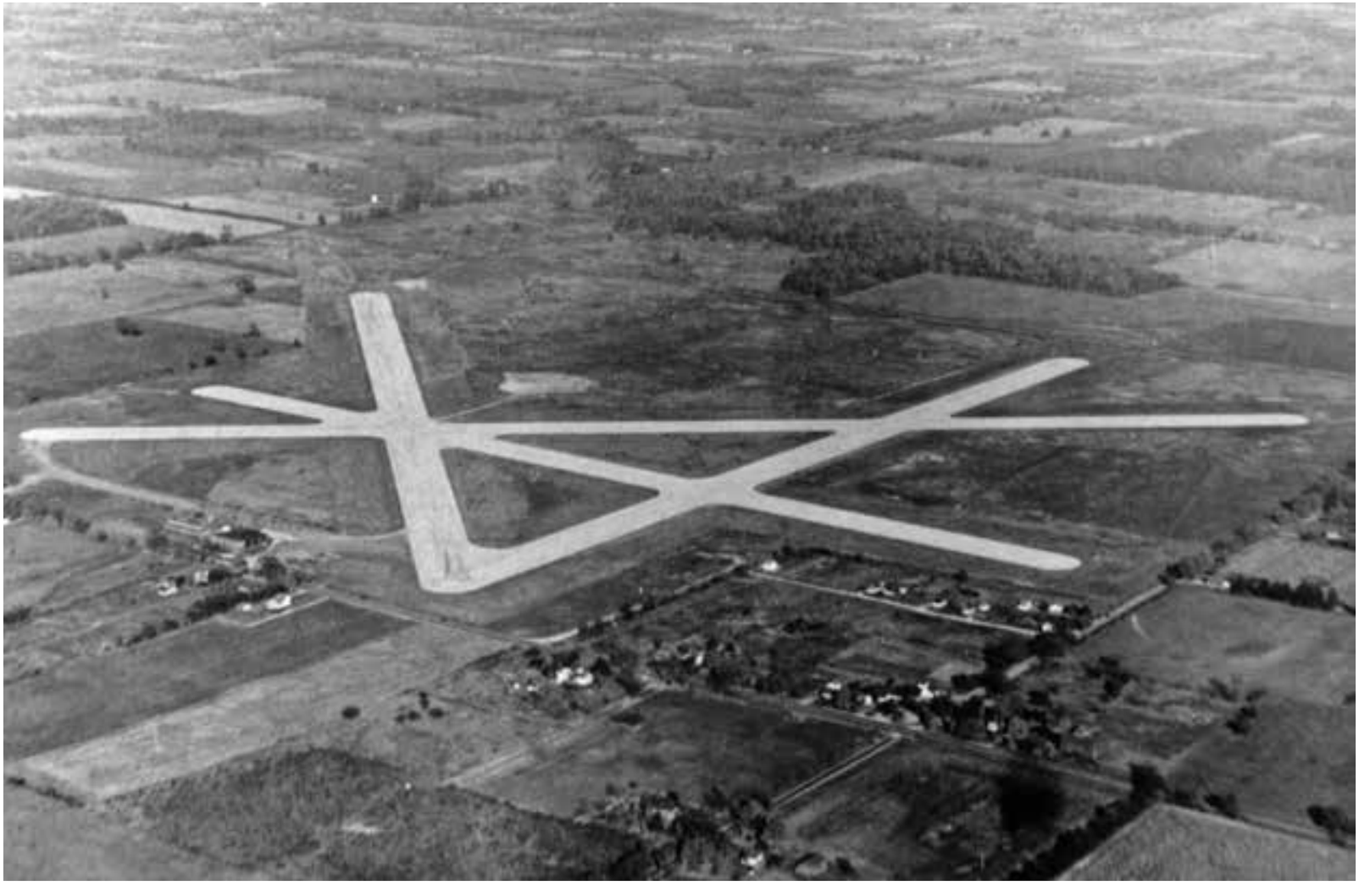
That June of 1942, 120, V-5 cadets arrived on campus and were bivouacked in Vandercook Hall. They hailed from all walks of life—salesmen, factory workers, clerks, police officers, teachers. They were not traditional college students.

From 6 a.m. to 9 p.m. seven days a week, all they did was eat, sleep, study the technology and science of aviation, and fly. This dawn-to-dusk regimen lasted eight weeks. The national goal was 20,000 naval cadets annually.

Early in the process, the Army Air Corps also had a pilot-training program under Weaver's aegis with its cadets also billeted in Vandercook. But that only lasted until December of 1942 when Western was designated an exclusive, full-time U. S. Navy Pilot Training Center, thus avoiding the prospect of a traditional Army-Navy rivalry on the Western campus.

Weaver's aviation-mechanics program in the new building had also grown from diapers to long pants. Enrollment had quadrupled because the men who built and maintained the planes were just as important as those who flew them. Students could stay for a two-year degree or, like in today's community colleges, depart when job opportunities in the war effort surfaced.

Once again, the predecessor of the Upjohn Institute stepped up, delivering another $60,000 for national defense and for promoting post-war employment opportunities in the vocational trades. This gift produced the new center at the city airport with a capacity to train the V-5 cadets.



Kalamazoo Municipal Airport during the Navy V-5 program. Picture taken toward the northeast. [1943]

Western negotiated a long-term lease with the city for the 20,000-square-foot structure that housed an assembly room, inspection shop, service area, offices, a lobby, lockers, and classrooms. A hangar to handle six planes was constructed. Later, aviation barracks would be added.

Within months Western was in "the thick of the fight back" as a major contributor to the training of hundreds of military pilots and as many as 4,000 men and women in war-production roles. Prepared as flyers and aviation mechanics, they headed out to bring an end to the war.

An inferno delivered a body blow to Western's V-5 initiative in May of 1943 when flames destroyed the hangar, 14 planes, 30 parachutes, and other aviation equipment at the airport, causing $85,000 in losses. But the delay was minimal because planes were loaned for the V-5 pilots to use until new equipment arrived.

Joining the V-5 concept that same month was another Western agreement with the Navy. The V-12 program would bring 700 trainees to campus to become apprentice seamen and deck officers. By 1944, the V-5 squadron at the airport grew to 30 aircraft, including some biplanes. In all, 900 men went through these Western programs.

They were in such number and force that many "normal" students were routed out of Walwood, Spindler and Vandercook halls to house the military. Halfway through the war, some 200 Army, Navy and Marine pilots had been Western-trained.

Females pilots again came to the forefront as the war droned on, with Western training its share of those who flew as members of the Women's Airforce Service Pilots. One of those who ferried planes from factories to airfields where men took them into battle was Kalamazoo's own Suzanne Upjohn Parish, who later was awarded a Congressional Gold Medal for her World War II WASP service. She and Weaver were two of the first inductees in the WMU College of Aviation Hall of Honor in 2010.

Western Michigan Flying Service Maintenance crew. [1943]

Standing: H. Ellinger, Guatamalan Student Nick Raphael, G. Boyer, Wayne Hunt, Ralph Mishler, Allen Case
Front: Rodger Lindys and Ray Baccus

Line up of Western Michigan Flying Service Planes. [1943]

ALL NOT QUIET ON THE WESTERN AVIATION FRONT

In the wake of the V-E and V-J celebrations, the question was "Quo vadis, Western aviation? Where goest thou?"

The answer would come quickly because commercial aviation and the airline industry were poised to advance at the speed of sound. Western positioned itself to go along for the ride even though "Buck" Weaver ended his direct connection to the program shortly after the end of World War II. He continued to teach at Western until 1955 when he took early retirement and joined the Stryker Corporation's research-and-development unit.

Under the direction of Dr. Joseph Giachino, the aviation curriculum was modernized. The mechanics program received CAA certification, setting the stage for Western to educate returning veterans under the G. I. Bill. One stipulation was that the vets enrolled in aviation mechanics would also receive flight training at government expense.

To assist Western, 16 military-surplus planes were delivered to Kalamazoo, along with engines and a spectrum of aviation accessories. Many of these components were stored along Stadium Drive by the Mechanical Trades Building.

In January of 1947, Western became one the first schools in the nation to establish a comprehensive air-transportation curriculum in its four-year, degree-granting system.

That curriculum pointed majors toward managing or operating an airport and filling administrative, supervisory and sales positions in the business of aviation. They could concentrate on the mechanical aspect of the profession and qualify for CAA licensing as airframe and powerplant mechanics. They could also take the instruction leading to a private pilot's license. The prototype of the College of Aviation's future educational thrust was taking shape with four-year degrees in these phases in the offing.

The program must have been doing something right because one alumnus was a captain for Trans World Airlines, another was a key designer of the ground equipment for the growing fleet of large passenger jets, and graduates were placed with every major airline.

Some of the college's student aviators in the fall of 1946 formed a flying club, reacting to an idea hatched by two coeds. The 18 charter members chose the name of Sky Broncos and the moniker stuck. The first vice president was a woman. The organization, in the coming years, would earn as much national recognition as the aviation program itself. More about that later.

As a teacher-training institution, Western offered courses that would help its graduates stress the importance of aviation in the country to their future students in both elementary and high-school grades. The aviation-for-teachers classes included chances to pilot a plane. Workshops for existing K-12 teachers were also offered for them to deliver that same message in the schools of the post-war United States.

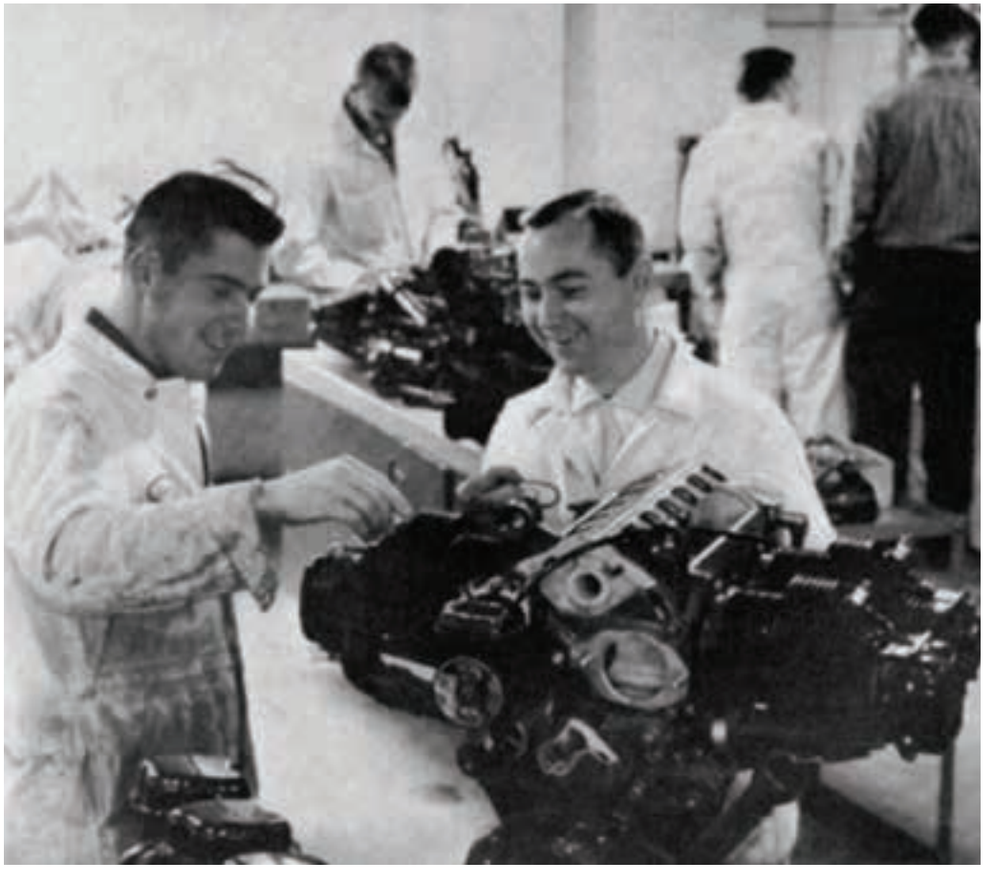
Changing times in aviation and the college's view of the future crossed paths on campus in 1948 when eight advanced students built their own jet engine using a Curtiss C-46 combustion heater and a surplus turbocharger. Among them was an African American—the roots of the College of Aviation's future commitment to diversity. The Jet Age officially arrived with the donation of a surplus jet engine by the Air Force.

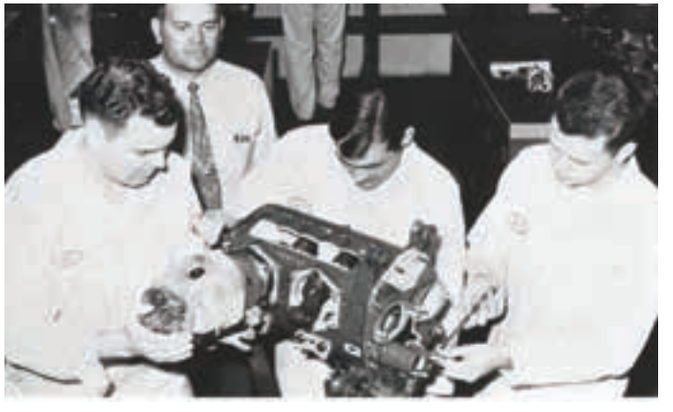
That same year, reacting to the needs of the airlines, the aviation department added a three-year program—the second in the United States—to train what were then called air hostesses. The criteria were based on the airlines' physical requirements.

Prospects must be from 5 feet in height to 5 feet 6 inches. Acceptable weight, proportional to height, could range from 100 to 125 pounds. As with pilots, the air hostess must not need glasses, be "well proportioned," have "good carriage," be "neat and attractive," have a "pleasing, well-modulated voice," and be single—never married. They would also be taught to "deal with the air-traveling public."

The first graduate in May of 1950 was quickly hired by American Airlines and assigned to fly out of Los Angeles. The program was phased out when airlines began to offer their own training and cater to their specific needs. "Air hostess" became "stewardess" and is now "flight attendant," with both genders now represented in the profession.

As part of the nation's effort to remain war ready, 11 Western student veterans still had military attachments in the reserves of the newly created U.S. Air Force in 1948. They were pilots in the 549th Bombardment Squadron based at W. K. Kellogg Field that almost 40 years later would become home for the WMU College of Aviation.





Top: Overhauling a motor is supervised by Mr. Robert Ring. [1950]

Left: Albert Koning and David McLinden work on machinery in Mr. Robert Ring's aircrafts class in power plants. [1950]

Advanced Aircraft Engine class. Herb Ellinger, instructor (on left). [1949]

A NEW THRUST

After returning to its past format of contracting the flight training with private entrepreneurs in their quarters based at the Kalamazoo Municipal Airport, Western chartered another course.

The college's own flight instructors would do the training in aircraft based at the Plainwell airport. Beginning in 1955, under the supervision of Clarence VanDeventer, 17 students signed up to learn to fly in leased planes. Because aeronautical skills were proving to be beneficial in a variety of careers, enrollment grew to 100 within a year.

VanDeventer's students were being schooled by a Western teaching resource who was in the team photo for notoriety with the internationally renowned Charles Van Riper, the revered speech pathologist and researcher of stuttering. VanDeventer authored a text used by the Armed Forces, many universities and the state of California.

He wasn't the only star on the flying faculty. Also part of the flight training staff was Lester Zinser, a World War II bomber pilot who came on board in 1957. A captain in the Air Force Reserve, he advanced to the position of chief flight instructor, the first to do so.

That job, Zinser said, "Needs a great deal of patience. Every student presents a real challenge. Giving flight instruction is difficult, nerve-wracking and tiring work."

The future inductee into the WMU Aviation Hall of Honor was recruited away from Kalamazoo to join the National Center for Atmospheric Research in Colorado in the mid-1960s. Such was the quality of Western's staff.

During this time, Western experimented with the concept of owning its own fleet of planes. In what was seen as a win-win idea, Western would purchase "wrecks" at a bargain-basement price—if they were deemed flyable at all—and have air-frame technicians and aircraft mechanics refurbish them as part of their training.

By 1959, the flight training had been lured back to the north end of the Kalamazoo Municipal Airport along Kilgore Road where it would stay in various forms for 28 years. The move was cemented when additional hangars for a larger fleet and facilities were part of the bargain. Greater capacity allowed non-majors to pursue a pilot's license. One of the selling points to them was that "it is much easier to learn to fly a plane than it is to drive a car."

Wrote one observer about this horizon-expanding opportunity: "They aren't daydreaming or bored, and both student and instructor usually gaze out the window when class is in session. That's because the classrooms are 'up there'—with no 'desks' and no blackboard. Instead, a board full of measuring devices. The classroom is a Piper or Cessna. Once class is over, the classrooms are returned to a hangar for check-ups."

INTO THE 1960s AND BEYOND

The institution became WMU in 1957 and, by the end of the decade nearly 1,000 students had completed the aviation program since its founding. A four-year degree in aircraft technology—another national first—had been added to the two years of instruction previously available. The bachelor's degree would later offer two other tracks.

Aviation was incorporated into the new Transportation Technology Department in the School of Applied Arts and Sciences in 1966. Harley Behm came to Western as the department chair, just in time to see a new aviation building under construction at the Kalamazoo airport for the flight-training, airframe and mechanics operations.

A former home on campus, the Mechanical Trades Building, was being reconfigured for the university's expanding printing department. Because all phases would be situated in one location, there would no longer be a need to move aircraft parts from the airport to the campus for overhauls and repairs, and retrace those steps.

What amounted to a $300,000 expansion doubled the number of flight-training enrollees, improved the taxiways, and added three planes to the Western fleet.

Up to then, the program could only serve half of the students who applied for the 40 hours of flight instructions that cost $300. Impacting the load was that Reserve Officers Training Corps programs at Western called for flight instructions as well. The capacity in the two-year program in aviation technology had been 15 students, while 100 was the peak in the degree-granting sector. These limitations would change.

In November of 1965, Lake Central Airlines brought commercial jet-prop service to the Kalamazoo airport. North Central Airlines planned to begin all-jet service in the spring of 1967—requiring a runway extension—with Allegheny Airlines close behind. Aviation at WMU had to be in sync with that kind of training. Jets had become the aircraft of choice for military and commercial aviation.

NASA was also in action, charged with upgrading navigational and air-traffic controls because U.S. air space was becoming more and more

Air maintenance and flight training are becoming important parts of Western's curricula. Here, Professor Clarence VanDeventer helps students with a plane.

crowded. Western's training had to reflect that, along with showing how to deal with the disorientation pilots may encounter in bad-weather and poor-visibility situations.

The early 1970s saw the arrival of the program's first modern flight simulator. Western had already owned a Link instrument trainer in 1947. The arrival of the new simulator meant students could "fly anywhere, in any kind of weather, and in any kind of situation." Able to emulate 10 approaches an hour, it proved to be a great teaching tool versus an actual plane in which noise and turbulence can impede learning. However, even this simulator could never take the place of real flying time.

When the Air Force donated an F-80 Shooting Star to the university for jet-engine training in 1972, Behm responded to noise complaints from airport neighbors by having a sound-proof engine test cell constructed. The early 1970s also saw the addition of a Cessna 310 to enable students to earn their multi-engine rating. It was joined by a 200-horsepower Piper Cherokee Arrow to satisfy new Federal Aviation Administration requirements. A federal mandate fenced the entire airport for security reasons, another omen for commercial aviation's future.

Western returned to its past and generally got out of the airplane-owning business, entering a lease agreement with Cessna Aircraft Corporation. The college sold its older planes and used that revenue to upgrade the training equipment such as ever-improving flight simulators. There would be no more annual fleet updating at college expense. By the end of the 1970s, 400 students could learn their trade by flying and working on an 18-plane fleet that featured the latest technology.

Wrote one reporter: "When it comes to a high-flying college education, no one in the state does it better than Western Michigan University. Few in the nation do -- offer degree-earning curriculums for those who want to become professional pilots, aircraft craftsmen, and aviation administrators. The graduates go on to work for commercial airlines, the military and corporations. Being based at a municipal airport gives students an authentic look at how the aviation system works."

Sky Broncos practicing for competition. [1983]

THE SKY BRONCOS AND MORE

Less than a year after the club formed, a five-member team of Sky Broncos—including a female—competed in the first post-war National Intercollegiate Flight Association tournament in May of 1947, and finished first among 14 entries.

The Western contingent repeated the accomplishment the following year—beating 18 teams from across the nation—after hosting and winning the NIFA state meet at the Kalamazoo Municipal Airport in the spring of 1948.

These were the first of five national titles for the Sky Broncos.

Again qualifying for the nationals by winning the state meet and bidding for a third consecutive championship at the Fort Worth home of the Texas Christian University Flying Frogs, the Western flyers fell a half point short.

Ahead after five of the six events, Western lost the 1949 championship to UCLA in the bomb-dropping competition that involved aiming two-pound bags of gravel at 50-gallon drums from a height of 250 feet. Once the winds of war calmed, bomb dropping became a part of the tournament's history.

Western stayed in the national limelight when Sky Bronco, Reid Arnold, served as NIFA president. Membership soon shifted to all males with half of them veterans of Army and Navy flying experience in the war. Women were still welcome if they were licensed pilots. There was a waiting list for all prospective members.

In the club's early days, the college bought the planes that usually were in a somewhat crumpled condition. That gave the aviation mechanics in the corps a chance to restore them to flying condition.

With the departure of the G. I. Bill veterans, the Sky Broncos became somewhat dormant into the 1950s before being re-energized. The organization began accepting associate members—those who were interested in flying but not yet licensed pilots.

Back at the top of their game, the Sky Broncos hosted their first national competition at the Kalamazoo airport in 1962. The three-day event attracted 50 light planes and 150 flyers from 28 colleges and universities. Performances by jet precision-flying teams became part of the entertainment at the annual meets.

Sky Bronco teams returned to coed status with as many as 19 student pilots competing for the Brown and Gold in the competition's events.

With each year, the Broncos became more of a factor as a favorite to win it all, which they did in 1983, in 1998 at Kansas State University, and 2002. Many Western flyers captured individual honors, such as the top gun among college pilots and best female pilot. The 1983 team had a home-field advantage of sorts because the 35th annual competition was staged at Kellogg Field. NIFA teams also competed there in 1997.

The number of entrants, from New Mexico to Montana and from coast to coast, grew annually and now boasts of more than 400 competitors from 31 institutions—including the Air Force Academy—vying for honors in nine events. Instead of bombs, they drop "messages."

Sky Broncos National Championship rings. [1998, 2002]

At one point, the Western pilots won 12 of 14 regional titles, hosting that level of the competition at Kellogg Airport as recently as 2013 and attracting teams from 10 states. In the nationals, they placed in the top three 16 times in 19 years, including 14 consecutive such finishes. For 18 straight years, they were in the top four among the scores of collegiate teams.

For the 2011 NIFA competition held at Ohio State University, the Sky Broncos paid tribute to Jeffrey Haney, the captain of the team that won the 2002 national championship. Haney, a captain in the Air Force, was killed only months earlier when his F-22 Raptor crashed in Alaskan mountains during a training mission.

Haney's name was painted on the side of the Cessna 150 that he piloted in the 2002 competition. That same plane was flown in the Columbus, Ohio, meet by members of 2011 Sky Broncos. Haney, a Western flight instructor before joining the Air Force, was placed in the College of Aviation Hall of Honor in 2011.

Western aviation scored a coup in 1986 when two of its students—both Sky Broncos and majors—and two graduates were selected for the six-member U. S. Precision Flight Team that competed in Finland in what is called "The Olympics of Aviation." Organizers called it an event for pilots who "specialize in seat-of-the-pants flying in single-engine planes."

Beginning in 2000, Western women aviators started competing in the Air Race Classic, a transcontinental race dating back to 1929 and the likes of Amelia Earhart, who founded the Ninety-Nines, a sponsoring organization of licensed female pilots.

Student preflighting. [1984]

A 2,000-mile trek would start in places such as Tucson, Ariz., and end in Hyannis, Mass. Each derby featured as many as 50 flying duos. If 2,500 miles comprised the long-distance, multi-day flight, it might take off in St. John, New Brunswick, and finish in Oklahoma City.

Winning the Collegiate Trophy in 2005 and placing second twice in that category, Western flyers scored their highest overall finish in 2006—fourth. In the event's 80th year, 2009, Kelly Burris, a 1988 WMU graduate with degrees in aeronautical engineering and law, and her co-pilot flew across the finish line first at Atlantic, Iowa, in her 1962 Beechcraft Debonair.

Taking a cue from the Sky Broncos' success was Andrew Kincaid, a Battle Creek senior majoring in aviation maintenance technology. He won top honors in the national 2013 SkillsUSA championship, demonstrating Mr. Goodwrench and electronic-diagnostic talents that come into play as an aviation technician. It was the first time Western entered the competition and, just like the Sky Broncos decades earlier, the result was identical—a national title.

Students succeed because they have mentors who know what they are talking about and can impart their knowledge. Western faculty and staff members have been recognized as Michigan Flight Instructor of the Year and Flight Instructor for the Great Lakes Region. They have earned accreditations as Master Certified flight instructors, a coveted designation that fewer than 400 people have in the nation. The expertise has spread to Western's ground operations via an FAA-sponsored designation as Aviation Technician of the Year for this part of the country.

When it comes to student organizations affiliated with Western's aviation program, the Sky Broncos have not been flying solo. Students can take advantage of the mentoring and career-advancement benefits offered by a chapter of Alpha Eta Rho, the Aviation Student Council, the Multicultural Association of Aviation Professionals, the Professional Aviation Maintenance Association, SkillsUSA, and Women in Aviation.

Five national titles and more than 30 Regional titles rate the Sky Broncos as a champion in showering national acclaim on WMU. Does any other Western activity or function match that? Maybe the vocal-jazz talents of the Gold Company for starters.

Above: Participating in the dedication of the new College of Aviation facilities in Battle Creek, Sept. 19 ,1997, were, left: Richard Burke, Greg Lyman, Joe Dunlap, Jim Hettinger, George Franklin, Perry Jones and Diether Haenicke.

Right: Old tower, W.K. Kellogg Airport.

THE BIG MOVE – GOING GLOBAL

For nearly six decades, Western aviation students had pursued their personal and career dreams at several locations—the evolution of Lindbergh Field into the Kalamazoo/Battle Creek International Airport, the Kalamazoo campus, the Plainwell airport and the Austin Lake flying strip.

The shifts were for many reasons—what's best for students, budget constraints, local politics, response to war.

None compared to what was envisioned over a four-year period and what crystallized in the late 1990s—The Big Move, the one that would take Western aviation global by the fall of 1997.

With the approaching of the Millennium that prophesied the world would become an even smaller place, Western and community visionaries focused on the future of a university department that was part of the College of Engineering and Applied Sciences by 1993. Two years later, the School of Aviation Sciences was created with Joseph Dunlap as its first director.

Dunlap was in the center of the crystal-balling, along with:

· RICHARD BURKE, vice president for regional education and economic development at WMU. He brought to the table the understanding that aviation was a powerful tool in the continued vitality of Southwest Michigan and that Western must remain a key factor in the economic equation.

· GEORGE FRANKLIN, a former chair of the WMU Board of Trustees, future head of the College of Aviation Advisory Board, and former Kellogg Co. executive.

· JAMES HETTINGER, a Western alumnus who spent 29 of his 30 years at Battle Creek Unlimited as its president and chief executive officer. His term on the WMU governing board is set to expire in 2016.

· GREGORY LYMAN, a certified flight instructor and pilot who at the time was senior vice president and corporate secretary of the W. K. Kellogg Foundation. He would eventually serve a six-month stint as the aviation college's dean.

Into the 1990s, Western aviation continued to base its program at the Kalamazoo airport, to host open houses, to stage fly-in breakfasts, and to sponsor professional clinics there. Two limiting factors hamstrung its future—it was a working commercial airport and it was landlocked. Expansion of Western's 27,000-square-foot footprint there was out of the question, especially with the dreams that were taking shape.

The School of Aviation Sciences was offering the state's only public, four-year bachelor's degree in aviation. Enrollment stood at 550. More important, there was little if no room to grow. That was not part of the vision. Reality would cost $38 million.

The ad hoc planning team, working in conjunction with WMU President Diether Haenicke and Congressman Fred Upton, began to forge partnerships with key economic groups, develop a consortium of supporting organizations, and line up funding sources. The target was Battle Creek's Kellogg Field with its extensive runways, aviation-related businesses, and available facilities that would almost triple the Kalamazoo space.

Federal grants were awarded, including one by Congress and another appropriation from the U. S. Department of Commerce totaling more than $11 million--the largest single federal grant in the university's history. That commitment drew $6.5 million from the Battle Creek Tax Increment Finance Authority. Support also came from Battle Creek Unlimited, the city of Battle Creek, the Kellogg Company and the Kellogg Foundation. The groundbreaking was in October of 1994.

What did that money buy in facilities spanning almost 100,000 square feet? A renovated flight-operations building that had been an airport terminal and tower, a new classroom building, and a reconfigured hangar-laboratory-maintenance structure. All of which was presented to the public at a Sept. 19, 1997, dedication ceremony. Haenicke called it a "Cadillac of an aviation program." It would become more—the nation's first international school of aviation.

The move to Kellogg's 20 acres also produced a revamped curriculum, increased the size and variety of the training fleet, and purchased state-of-the-art simulators.

Under development almost coincidentally was the first fruit of The Big Move, another milestone—the creation of the International Pilot Training Centre. British Airways inked a $6-million contract as the first major client in December of 1997. It was the first time that one of the world's largest airlines decided to use an American facility to train new pilots—16 the first

year. The arrangement had been approved by England's version of the FAA.

The 16 would not be Western students per se, not taking elective courses, for example. They would concentrate on learning to fly under the European method—"ab initio"—which is designed to train students with no previous flight experience and upon graduation move right into an airline position. Western at the time was also employing the "ab initio" concept.

British Airways officials said they were swayed by the caliber of Western's program, the significantly lower costs, a 10,000-foot runway to use, and the prospect of training young pilots in a university setting. A bonus for Western was that the training fleet would jump from 30 to 35 aircraft because of the contract.

Within months, Western made similar training arrangements with Ireland's Aer Lingus and Emirates Airlines, the international carrier of the United Arab Emirates. When their cadets arrived, the number of fledgling pilots would be 72. The total was destined to shoot past 150.

The program's purchase of a jet-flight simulator for a five-week orientation course had attracted these two airlines. On Western's radar screen were future contracts with Asian and African operations. This simulator catapulted Western into being one of the few schools in the nation equipped to prepare students to fly the latest generation of jet airliners.

Making the jet simulator possible was another TIFA appropriation—$1.65 million—and a portion of a new $5.2-million grant from the Kellogg Foundation. The Kellogg funds also bought 15 more aircraft and other instructional equipment that would maintain the program's technological edge.

Another Big Day for The Big Move was in March of 1998 when the first group of 16 English cadets landed at Kellogg aboard a Concorde, the British Airways' supersonic flagship. No such aerial giant had ever landed before in Southwest Michigan.

An estimated 40,000 spectators flocked to Kellogg to watch the world's only supersonic passenger plane touch down. Why such a lure? The Concorde could cross oceans and deserts at twice the speed of sound—1,350 mph.

The viewers wanted to see for themselves what a plane with an 84-foot wingspan and 204 feet in length looked like. The Concorde could take passengers from London to New York in just under three hours. Because of U. S. regulations, it took 90 minutes after take-off at Kennedy Airport in New York to reach The Cereal City.

By late February of 2000, the original 16, after 13 months of accelerated training in the United States, were back home. Three took four of British Airways' top awards for flying competence.

What became the WMU College of Aviation in 1999 had made a good-enough impression that the Brits extended its special program for training people with physical disabilities to fly. It was named for Douglas Bader, who lost both legs in a plane crash prior to World War II. When his nation needed combat pilots for the Battle of Britain, he returned to the cockpit and shot down 23 German planes. Six disabled trainees went on to earn their wings after Western training.

America's airlines were paying attention to what was happening in Southwest Michigan. Western signed an agreement with a Northwest Airlines subsidiary—Mesaba—for training pilots who would be on a fast track for hiring as flight officers. It was the program's first with a domestic airline, and it would be followed by a similar pact with Delta.

Northwest added to the pot with the donation of a B747-100 to Western's fleet. Transfer of the Boeing-built plane's ownership marked the first known gift of a 747 to any university or college.

All of these developments led to the rapidly expanding College of Aviation earning a splash in the August 2000 edition of Flying, the world's most popular aviation magazine. Highlighted were the extensive programs and training facilities, the spiking enrollment growth because of the contracts with global and domestic carriers, the continuing success of the Sky Broncos, efforts to diversify the aviation profession, and the donations of multi-million-dollar jets to the program. News articles in The Chronicle of Higher Education, the Wall Street Journal and Forbes added to the renown.

The College of Aviation was soaring when the planet said goodbye to 1999 and there seemed to be smooth flying ahead. Enrollment had peaked at nearly 1,000, including the international students there for pilot training. But like in Bader's time, the world was about to change drastically. And it would never be the same again.

TURBULENCE

Where were you on Dec. 7, 1941? Where were you on Nov. 22, 1963? Where were you on Sept. 11, 2001?

For three generations of Americans, the answers to these questions were personalized, traumatized, frozen-in-time moments. As if the planet had stopped spinning on its axis.

For the masses, the events were life-changing and perspective-altering —like Saul of Tarsus, after a lightning bolt on the road to Damascus, morphing into St. Paul. "9/11" did that to Western aviation.

Before jihadist terrorists converted four airliners into guided missiles, the College of Aviation was soaring above the clouds—record enrollments sparked by arrangements with world-spanning airlines, a growing global reputation, and teaching resources second to none.

Headlines told the story: "All WMU planes back on the ground." "FBI conducts 'routine' check at COA." "WMU flight restrictions limited." "Tailspin could hurt COA." It was as if one of those pirated airliners had been crashed into Kellogg Field.

The death of the International Pilot Training Centre came quickly. The global air carriers immediately suspended their pilot-training programs. The airline industry around the world took a body blow that decimated their bottom lines, and halted searches for fresh, new, talented human resources that could fly their planes and keep them in perfect shape.

The college's enrollment shrank from 939 to 660 by the fall of 2009. There was some irony in that while the number of students wanting to become professional pilots dwindled, there was still a passion for some kind of career in aviation. Relatively holding their own were the headcounts for students interested in careers as aviation technicians, managers and administrators.

Just when it seemed that the world had recovered as best it could from the scenes of large passenger-laden aircraft hitting skyscrapers and crashing into a Pennsylvania field, the nation recoiled from a gut-wrenching economic recession from which it and the aviation industry have striven to overcome. By the end of the Millennium's first decade and as the college approached its 70th birthday, the bottomed-out point seemed to have been reached and enrollment was starting a slow climb.

There have been other kinds of bumpy moments over the three-quarters of a century.

Flying can be perilous, especially if one approaches heading toward the clouds in an unprepared, willy-nilly fashion. A human is not equipped to join the birds up there without the assistance of physics. Sometimes the technology can't overcome nature's rules. Just ask Icarus as he winged his way toward the sun.

Aviation at Western has experienced minor accidents— a Piper tipped on its nose because of pilot error here, an emergency landing there. But it has never had any major injuries to students and no fatalities. That's remarkable considering that Western pilots and their instructors are in the air for thousands of hours during a typical academic year. Multiply that number by 75.

The good has overwhelmed the not-so-good. Legendary flight instructor Pat Schiffer, in his 17th year as one of most popular teaching pilots in Western's history and an early member of the college's Hall of Honor, was almost fired in 1977 for "violating safety rules—flying with low fuel." He avoided being dismissed by a 4-3 vote of the WMU Board of Trustees and continued his outstanding career.

A $1.1-million reconnaissance bomber was sold to Western's program for less than $200 in 1971. Over the next decade, the grounded aircraft and its complex aeronautics were used for instructional purposes. Scores of times, its engines were dismantled, cleaned and re-assembled by Western techs.

Outliving its training usage, the plane was to be transported to the Selfridge Air National Guard Base on the east side of the state in 1983. A giant helicopter picked up the stripped-down, 15,000-pound fuselage and got as far as an 80-acre horse farm in northeast Kalamazoo County. Cut loose by the pilot when it became unwieldly, the plane's body hit about 50 yards from a house and could not be picked up. The fuselage made the rest of the trip in sections on trucks.

What could have been just as destructive for the college as the explosion of a large bomb was an FAA plan to cut costs by reducing the number of air-traffic control towers in the United States. In its bombsight was the tower at Battle Creek.

Wiser heads prevailed when the case was made to the FAA that W.K. Kellogg Airport was the third most active airport in Michigan—behind Detroit and Grand Rapids. It was an essential resource for the third largest college of aviation in the United States, with Western's aviation program being the primary reason Kellogg had become the fastest-growing general airport in the country. The College of Aviation's full recovery depended on it.

NAVIGATING THE ROAD BACK

If it takes a village to raise a child, what does it take to overcome something like "9/11" and a third cousin to The Great Depression?

Start with your "village's" people—like Thomas Deckard who spent 30 years being "the Face of Western Aviation" as much as anybody. He earned Hall of Honor status as a flight and ground instructor, a faculty chair, a department head, and director of flight education. Highly regarded campus-wide, Deckard received the university's Teaching Excellence Award. Graduates labeled him "the best" the aviation program could offer.

Deckard and his colleagues' expertise had to be part of the post "9/11" strategy that included a new breed of leadership for the changing times, more partnerships in the industry, a greater commitment to diversity, outreach into all facets of society to promote what the college offered, and a pledge that WMU students would be exposed to the best training, career opportunities, and technological breakthroughs possible.

One of the first steps was to recycle what was left of the International Pilot Training Centre. Easily salvaged was the college's reputation with the continent's version of the FAA—the European Joint Aviation Authorities. While the international training had been a separate module, it was now integrated into the college's overall domestic, degree-granting network.

The Certified Accelerated Training Program, launched in mid-2003, was designed to take advantage of the college's pre-"9/11" track record, attracting prospective pilots trained to work in both domestic and global air markets. Zero flying time was the starting point for all CATP enrollees. Side by side, American and international students would learn their future profession from 60 aircraft and the best innovation aviation had to offer—much of which was donated to the college.

The defunct training center had one last gift before flying into history. An Australian who had served on its faculty was so impressed with Western that when he returned home, he spearheaded the creation of a student-exchange program with the college and Swinburne University of Technology, that nation's premier pilot-training institution.

Joining Delta and Northwest's Mesaba in the college's stable of partners was Atlantic Coast Airlines based in Virginia. As with the other airlines that grew to seven in number, these agreements opened the door for Western students to become pilot interns and give them preferential consideration for hiring once their degrees were earned.

In a "Back to the Future" scenario, in 2004, the College of Aviation stepped into its past, announcing that eight of its Cessna 172s would return to its previous aviation facilities at the Kalamazoo/Battle Creek International Airport as part of a new tactic—providing flying experience for freshmen and sophomore enrollees who normally would spend their first two years on the Kalamazoo campus.

The philosophy was simple. What if you learned, as a junior, that you really didn't like to fly or that you didn't have the talent and skills needed for that career path? Freshmen needed a taste of being up there before making a major financial investment.

Good for students, and for the college. The shift created hangar space at Kellogg for new types of aircraft. From the "that-sounds-familiar" wing came this reason—the Kalamazoo-based fleet could also be used for non-aviation majors who wanted to learn to fly.

Increasing the pool of prospects can address enrollment dips. Even before the horrors in New York and Washington, the college took the initiative to have its student body mirror the face of America. Its outreach efforts included co-hosting aviation camps with the Organization of Black Airline Pilots.

WMU facilities at the Kalamazoo/Battle Creek International Airport.


N987WU
N992WV
N1180
N563RM
N1281

NEW FACES IN THE COCKPIT

The Aviation Education Consortium was formed in the spring of 2004 by Western, the organization, and five historically black colleges. Tuskegee Airmen Inc. was also involved. The objective was to diversify the aviation workforce and expand opportunities for minority and female students—namely, to seamlessly take these candidates from "the ninth grade to the door of the airline industry."

"Let's-do-something-about-this" facts explained "why" —about five percent of the commercial-aviation pilots were women; less than two percent held aircraft mechanic jobs. According to the FAA, the figures were worse for African Americans and Hispanics. The consortium's diversity initiatives could correct that and deal with other industry issues—an aging generation of pilots, a decrease in the number of aviators trained by the military, and the cost of pursuing aviation careers for all prospects.

Even before the consortium, Western had set a course to address this "good-old-boys" challenge in January of 2001 and it made front-page news in the business section of the prestigious Atlanta Journal-Constitution. Delta Airlines, based in Georgia, pledged $1.65 million over a four-year period for the college to train from 24 to 40 women and minority students to become pilots under the "ab initio" concept that, according to the FAA, was only being employed in the world at Battle Creek.

Excellence in Diversity Award banquet. [2013]

Eligible for the scholarships were graduates who had already earned degrees in other disciplines and current Western students. Those who completed the "ab initio" program would be on the fast track to full-time employment with Delta and its subsidiary air carriers as first officers.

The fallout from "9/11" stymied this initiative a bit, but it began to work, assisted by a diversity-promoting grant from the Kellogg Foundation. Over a decade, more than 160 Western students received support to enroll in the College of Aviation, with many moving on to jobs as civilian and military pilots. The percent of African Americans in the aviation student body was 6 percent. A typical class of graduates would include 30 women and minority students.

A LITTLE HELP FROM OUR FRIENDS

Alumni and friends of the college rallied to make certain this educational resource and generator of economic growth in Southwest Michigan overcame the challenges and remained viable. Sue Parish, who gained a national following for flying her pink P-40 Warhawk at air shows around the country, put her personal turboprop into the hands of the college and its students.

A successful Pontiac business executive never forgot his roots at Western where he took flight classes from 1956 to 1958 under VanDeventer at the Plainwell airport. Those lessons stuck as he amassed more than 20,000 hours of flight time in all types of aircraft, including the North American Sabreliner 60—once owned by golfing superstar Jack Nicklaus—that he donated to the college. The Sabreliner gave maintenance students the hands-on experience and knowledge needed to keep airborne a type of jet used for executive travel.

What could "Brown" do for the Brown and Gold of WMU? For the airplane techies, "Brown" could do a lot, and it did. The global package-delivery giant UPS—known for its trademark color—delivered a Pratt & Whitney 747 engine to the Kellogg campus for use in the maintenance technology curriculum.

Not to be outdone, FedEx Express, in conjunction with the newly renamed Organization of Black Aerospace Professionals, flew a retired Boeing 727-100 freighter to Kellogg Field. While it would never take to the air again, the Boeing would serve as a priceless training asset in the aviation program's arsenal.

It replaced a Boeing 747, which once hauled passengers for Northwest Airlines, in the school's technology-training fleet. Such gifts became selling points as the college adjusted to the recruiting wars that were heating up.

For students, the Boeings were close to being contemporary. To understand where they were right now in the technology of flight, they had to know where the science had been. That kind of perspective came with the frequent fly-ins by legendary planes—the World War II B-24A "Liberator" of which only two of the 19,000 bombers manufactured were still in the air. Students learned how they could stay in the air so long, and why they were so effective protecting maritime convoys and searching for German U-boats in the Atlantic. That was part of aviation's gloried past.


FedEx
Express
4

Arrival of Cirrus Fleet. *[2005-2006]*

In launching the 2005-06 academic year, the college offered a glimpse of the future with a move that, according to industry observers, gave other aviation schools "the head and shoulders" treatment in producing pilots and aircraft technicians.

To put it "head and shoulders" above the competition, Western retired its existing single-engine Cessna training fleet and, thanks to a 10-year lease with Cirrus Design Corp. in Minnesota, brought in 28 Cirrus SR20s and two SR22s. The new trainers featured the latest in safety, avionics and performance, and orginally, they were to be replaced every two years.

Western's announcement went like this: "This is by far the best airplane for WMU's needs. With these aircraft, we will meet or exceed the training standards of the commercial-aviation industry, and we'll be able to provide the best learning outcomes for our students. They'll learn to fly in the most sophisticated aircraft used by any collegiate program in the nation. The cockpit configuration is similar to today's airliners." Soon to follow were the flight simulators for these aircraft, and then Avidyne's glass cockpit avionics for the Cirrus fleet.

Compare those words to what was said by the program's director in 1948: "The aviation department of Western is progressing as the entire industry is advancing. . .We have an aviation department here that can be more than favorably compared with any college in the country. Our equipment is worth at least $500,000. . .A CAA inspector from Washington told me that Western has better equipment and a better program than a majority of the schools in the country."

What has changed in 66 years is the value of Western's aviation equipment. Also advancing with the times has been the quality of the No. 1 product—successful, contemporarily trained graduates. Proof of that came in the spring of 2008 when the WMU College of Aviation was inducted into the Michigan Aviation Hall of Fame for its record of establishing and maintaining "state-of-the-art, world-class professional aviation programs that are among the best in the world."

Aviation Outlook Day. *[2014]*

REACHING OUT

Aviation education is not a carbon copy of academia. A person can read about aviation and study its science. But a person must also do aviation, whether up in the air at the controls or on the ground armed with a torque wrench. The instructional mode delivered to students comes from hands-on, been-there-done-that personnel, and not solely from textbooks complemented by lectures.

That's exemplified by the college's current dean and his predecessor. David Powell and Rick Maloney hail from the real world of flying, not academia. Powell, with the college since 2003 and dean for seven years, brought with him 14 years in the Air Force, the rank of chief pilot for United Airlines based in Miami and San Francisco, and three years as flight manager for United's largest hub at Chicago's O'Hare International Airport.

Except for military service, Maloney matched his longtime colleague's credentials with 30 years of flying and flight-management experience that ended with his retirement as United's vice president for flight operations and the system's chief pilot. His Western days didn't damage his industry standing. He left to become president and chief executive officer of Pentastar Aviation in Waterford, Mich. A few semesters later, Pentastar made a major donation of aviation equipment to Western.

The college's reputation, earned via 75 years of experience, and the quality of the leadership are effective recruiting points. But strangely, so is Michigan's weather—stick around and it will change. Career pilots must know how to fly in all facets of weather. Those who attend aviation schools in Florida and the Southwest normally face "perfect" weather. That's great, but not reality. That's not the rest of the world.

If the College of Aviation is not strong in its home region and state, it can't be strong in the rest of the world. Still actively recruiting around the United States at career and college fairs, that's only part of the strategy to spread the word about what's available at Western, at Battle Creek's W.K. Kellogg Airport and in Southwest Michigan.

Each semester, the college showcases the assets that produce quality pilots and aviation technicians at open houses for families and friends. One brings in students from 75 high schools across West Michigan.

Free career-exploration opportunities are available to middle- and high-school students at a Summer Flight Academy and a Summer Engineering Academy. The flight academy attracts youth from around the country as well as from this part of Michigan. Attendees hear speakers talk about careers, take aviation classes, and fly.

The college and the Kalamazoo Air Zoo co-sponsor aviation summer camps for youth of high-school age who are beginners and who have advanced knowledge about flight. Increasing diversity in the industry is one of the objectives of these offerings. WMU representatives take part in Aviation Day presentations in the Detroit area to also accomplish this.

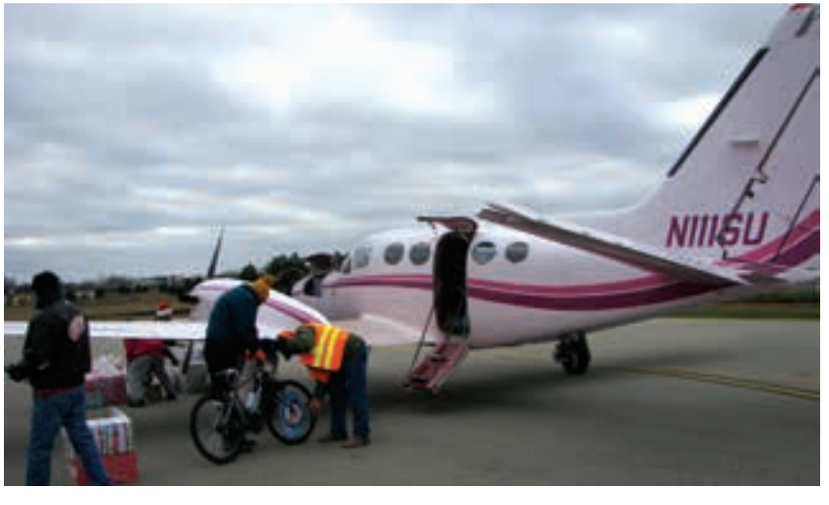
Aviation Networking Day, an aviation job fair, and Aviation Outlook Day link Western's students with companies and the growing number of jobs in the industry. A successful graduate in a joyful job is the program's best word-of-mouth advertiser. To keep alumni and others tethered to what is happening at the college, Pilot Proficiency Day assists aviators in adding to their FAA credentials as pilots.

Community outreach programs continue to broaden—a golf outing raises funds for the aviation college's student organizations; student pilots give Santa a hand in delivering Christmas presents to foster children around the state; hosting an exhibit of aviation art by K-12 students; and taking part in a national movement to give developmentally disabled children a chance to sample the thrill of flight.

The college went for a bigger splash in April of 2010 when a gala at the Hart-Dole-Inouye Center in downtown Battle Creek celebrated three events—70 years of aviation at Western, 10 years as the College of Aviation, and the charter class of the WMU College of Aviation Hall of Honor. The federal center is named for three wounded World War II veterans who were all rehabilitated at Fort Custer in the same ward and who all went on to serve in the U. S. Senate at the same time. Also honored that evening were Kellogg Field-moving visionaries Richard Burke, Joseph Dunlap, George Franklin, James Hettinger, and Gregory Lyman.

For decades, aviation at Western was on the receiving end of gifts and donations to help its students. The process was reversed in a déjà vu way.

To mark a growing partnership with the nation's first charter high school for young aviators, the college donated a flight simulator that was no longer needed and didn't match the sophisticated avionics of the Cirrus fleet. Located at Gerald Ford International Airport in Grand Rapids, the West Michigan Aviation Academy features three pathways—flight, aviation administration and aviation mechanics. Sound familiar?



"Operation Good Cheer" [2006]

NOW AND TOMORROW

Navigating its way toward a full century of service, Western's aviation program hasn't strayed too much from its original path. The technology has certainly advanced at warp speed, but not the philosophy of producing well-rounded graduates as evidenced by this 1948 perspective:

"Our kind of society—a democratic society—needs from no fewer than all its oncoming youth the cultivation of capacities to:

· Think logically and soundly

· Attack problems in an analytical way that will lead to productive conclusions

· Communicate accurately both in oral and in written speech

· Appreciate the world of art with discrimination as to aesthetic values

· Deal successfully with people in personal relationships

· Mingle in group associations and assume responsibility for democratic leadership or for being a democratic follower

· Understand the workings of the natural world and those procedures of the scientific method

· Become aware of the pervasive political and economic forces at work in our contemporary society

· Know what kinds of experience, standards and values have been found valuable and strive for them -- learn from history

· Be able to fill with competence a useful position in the world of work."

Today's degree-granting curriculums prepare students to learn the practical and academic aspects needed for careers as commercial and airline pilots, as managers and administrators in the aviation industry, and for technicians in the aerospace industry.

But all of those "capacities" first listed in 1948 are still being "cultivated" to produce the well-grounded, quality aviation professional.

What also hasn't changed in 75 years is that the review and revision phase of Western aviation and its technology has never been capped, never been raised up the flag pole and saluted in a "look-at-us-at-the-top" celebration. Maintaining the status quo makes you a historical milestone—nothing more. And, possibly irrelevant.

Reflecting on the university as a whole, the college has propelled itself into aviation research. It joined forces with the FAA in the training of air-traffic controllers, continued building partnerships with industry insiders, instituted a master's program with the WMU Haworth College of Business to provide post-graduate experience for aerospace managers, and equipped students with fresh-out-of-Silicon-Valley technology—mobile "apps" for pilots to replace old-fashioned flight bags full of "stuff."

At the conclusion of the first "Star Trek" full-length movie, Sulu, the Starship Enterprise's helmsman, asked Captain Kirk, "Where to, Captain?" Kirk's response was "Somewhere. Out there."

In its 75th year, the College of Aviation's response could be, "Somewhere. Up there." And maybe some day, "Out there."

Top: Engine running for a Wright R-1820 from a North American 0-47. Seats are from a Fleetwood amphibian. [1946]

Bottom: Student trouble-shooting an engine running stand made by cutting down a North American AT-6. [1949]

Pappy VanDeventer pictured to the right in the glasses.

WMU TRAINING EQUIPMENT

AIRCRAFT / ITEM MAKE & MODEL	ROLE PLAYED AT WMU	OWNERSHIP
1920 – 1929		
Standard J-1	Flight	Private
Avro 504K	—	Private
Leonard LPT -1	Flight/Maintenance	AZO Glider Club
1930 – 1939		
Home Built Secondary Glider built by students at WMU - 1930/31	Flight/Maintenance	AZO Glider Club
Curtiss P-6 Hawk	Maintenance	WMU
Curtiss Wright Junior CW-1 -1931	Maintenance	WMU
Luscombe 8A	Flight/Maintenance	Local FBO
Parks P-1	Flight	Local FBO
Taylor E-2 CUB - 1932	Flight/Maintenance	Local FBO
WACO Taperwing	Flight	Local FBO
WACO UPF-7	Flight	Local FBO
1940 – 1949		
Aeronca Champion 7AC ("Champ")	Flight/Maintenance	Local FBO / SB
Aeronca Chief 11AC	Flight/Maintenance	Local FBO
Aeronca LB	Maintenance	WMU
Aeronca TC-65 Defender "Grasshopper"	Flight/Maintenance	Local FBO
Aeronca TG-5 Glider	Maintenance	WMU
Bell P-39 "Aircobra"	Maintenance	WMU
Boeing Stearman PT-17 Kaydet (A75) -1941-45	Flight/Maintenance	Local FBO
Cessna AT-6 (T 50 "Bobcat")	Maintenance	WMU

AIRCRAFT / ITEM MAKE & MODEL	ROLE PLAYED AT WMU	OWNERSHIP
1940 – 1949		
Cinema TC-2 Sailplane - 1941	Flight/Maintenance	AZO Glider Club
Consolidated-Vultee BT-13 "Valiant"	Maintenance	WMU
Continental 0-50 Engine	Maintenance	WMU
Curtiss C-46 Commando	Maintenance	WMU
Fairchild PT-19A "Cornell	Flight/Maintenance	WMU
Fleetwing's "SEABIRD"	Maintenance	WMU
Kinner Engine 3 cyl - 1947	Maintenance	WMU
Lycoming 0-145 Engine	Maintenance	WMU
Meyers OTW	Flight	Local FBO
Model C-3 Link Trainer - 1942	Flight	FT
North American O-47	Maintenance	WMU
North American T-6 "Texan"	Maintenance	WMU
Piper J-2 "Cub"	Flight/Maintenance	Local FBO / SB
Piper J-3 "Cub"	Flight/Maintenance	Local FBO / SB
Pratt & Whitney R-1340 Wasp Engine	Maintenance	WMU
Pratt & Whitney R-1690 Wasp Engine	Maintenance	WMU
Ranger In-Line 6 Engine	Maintenance	WMU
Seversky A-12 (P-35)	Maintenance	WMU
Taylorcraft L-2	Flight/Maintenance	Local FBO
Travel Air 4000	Flight	Local FBO
Wright Cyclone Engine	Maintenance	WMU
Wright Whirlwind Engine	Maintenance	WMU

Top: Cessna C182RG [1979] Bottom: Cessna C172M [1979]

Cessna 150 [1966]

WMU TRAINING EQUIPMENT

1950 – 1959

AIRCRAFT / ITEM MAKE & MODEL	ROLE PLAYED AT WMU	OWNERSHIP
Cessna 170B - 1956	Flight/Maintenance	Local FBO / WMU
Cessna 140 - 1958	Flight/Maintenance	
Continental C-65 engine	Maintenance	WMU
ERCO Ercoupe	Flight	WMU
GE J-31 Engine - 1950	Maintenance	WMU
Luscombe 11A Sedan	Flight	Local FBO/ WMU
Piper J-5 "Cruiser" - 1957	Flight/Maintenance	WMU
Piper PA-12 "Super Cruiser" - 1958	Flight/Maintenance	WMU
Stinson Voyager - 1953	Flight	Local FBO

1960 – 1969

Beech 18	Maintenance	WMU
Cessna 150 Sept 18/66	Flight	WMU
Cessna 172 Sept 18/66	Flight	WMU
Continental GSO - 526 Engine	Maintenance	WMU
Continental O - 200 Engine	Maintenance	WMU
Continental O-360 Engine	Maintenance	WMU
GE CJ-610 Engine	Maintenance	WMU
Grumman Cheetah	Flight	WMU
Hiller Helicopter	Maintenance	WMU
Lycoming T 53 Engine	Maintenance	WMU

1970 – 1979

AIRCRAFT / ITEM MAKE & MODEL	ROLE PLAYED AT WMU	OWNERSHIP
Cessna 150 - June 1977	Flight	WMU
Cessna 310B - 1972	Flight	WMU
Lockheed T-33 - July 1973	Maintenance	WMU
Martin B57 "Canberra" June 1971	Maintenance	WMU
Piper Arrow PA28-200	Flight	WMU
Piper Seminole PA-44	Flight	WMU
Republic F84 "Thunderstreak" October 1971	Maintenance	WMU
Rolls Royce Dart engine	Maintenance	WMU

1980 – 1989

Cessna 152 II - 1981	Flight	WMU
Beech Model 50 Twin Bonanza	Maintenance	WMU
Cessna 152 August 1982	Flight	WMU
Cessna 152 II - July 1985	Flight	WMU
Cessna 172 - July 1985	Flight	WMU
Cessna 182RG - 1981	Flight	WMU
Cessna 414A Chancellor	Flight/ Liason	WMU
Lycoming T 55 Engine	Maintenance	WMU
Piper Aztec PA – 23	Maintenance	WMU
Pratt & Whitney JT-15D	Maintenance	WMU

Top: Robertson R-22. [1998]

Bottom: Frasca 737-400 Flight Simulator. [1999]

Piper PA-18 Super Cub (Amphibious) [1997]

Cessna 172 [1985]

WMU TRAINING EQUIPMENT

AIRCRAFT / ITEM MAKE & MODEL	ROLE PLAYED AT WMU	OWNERSHIP
1990 – 1999		
Bell UH-1 Iroquois "Huey" -1998	Liason	WMU
Cessna 172R - 1997	Flight	WMU
Extra 300 -1998	Flight	WMU
Frasca 142 Seneca Simulators - 1998	Flight	WMU
Frasca - 737 Simulator - 1999	Flight	WMU
Mooney Ovation - 1998	Flight	WMU
Piper Seneca PA - 34 -1998	Flight	WMU
Piper PA-18 Super Cub (Amphibious) - 1997	Flight	WMU
Pratt & Whitney PT-6	Maintenance	WMU
Robertson R - 22 - 1998	Flight	WMU
Shorts Skyvan 1999	Maintenance	WMU

Top: Leard Wylie and student with jet engine. *[1998]*

Bottom: Pratt and Whitney JT9D-7F engine. *[2008]*

Cirrus Fleet *[2005-2006]*

Top: Cirrus Simulator [2006]
Bottom: Cessna C425 Conquest, "Pinkie" [2006]

WMU TRAINING EQUIPMENT

AIRCRAFT / ITEM MAKE & MODEL	ROLE PLAYED AT WMU	OWNERSHIP
2000 – 2009		
Beech B58P Baron - 2009	Maintenance	WMU
Boeing 747 - 2000	Maintenance	WMU
Cessna C425 Conquest	Liason	Sue Parish / WMU
Cirrus SR-20 -2005/06	Flight	WMU
Cirrus SR-22 - 2005	Flight	WMU
Fairchild Swearingen Merlin II - 2007	Maintenance	WMU
Frasca CRJ Simulator - 2006	Flight	WMU
Frasca SR 20 Simulator - 2006	Flight	WMU
North American Sabreliner 65 - 2004	Maintenance	WMU
Piper PA-44-180 Seminole - 2004	Flight	WMU
Piper PA-28-200 Arrow - 2002	Flight	WMU
Pratt & Whitney JT9D-7F (747 Engine) - 2008	Maintenance	WMU
2010 – 2014		
Boeing 727 - 2011	Maintenance	WMU
American Champion Super D - 2013	Flight	WMU
Beech King Air C90 - 2010	Maintenance	WMU
IAI Westwind Jet - 2013	Maintenance	WMU
Piper PA-44 -180 Glass cockpits - 2011	Flight	WMU

Super Decathlon [2013]

CRJ Flight Simulator [2006]

September of 1939 marked the beginning of the first aviation courses taught at Western State Teachers College. That semester tuition for in-state residents was $15; student fees were $19.25; class dues were $0.50 and if you did not have a picture I.D. that was $0.25. Dormitory room and board cost approximately $137 per semester.

EVOLUTION OF AVIATION PROGRAMS AT WESTERN MICHIGAN UNIVERSITY

September of 1939 marked the beginning of the first aviation courses taught at Western State Teachers College. That semester tuition for in-state residents was $15; student fees were $19.25; class dues were $0.50 and if you did not have a picture I.D. that was $0.25. Dormitory room and board cost approximately $137 per semester. The vocational aviation mechanics program at Western State Teachers College in combination with the United States Civil Aeronautics Authority Pilot Training program prepared students for positions as licensed airplane mechanics, licensed engine mechanics, airplane factory mechanics, and pilot mechanics.

By the fall of 1940, the official catalog identified the vocational aviation mechanics program as a two-year curriculum in vocational training leading to a diploma in aviation mechanics. Entrance requirements were set at graduation from high school, mechanical aptitude of high order, and recommendation of high-school principal or superintendent. In addition to tuition, a lab fee of $15 each semester was charged. The departmental advisor reserved the right to dismiss, after a semester tryout, any student who failed to exhibit superior skills or to maintain high standards in the various courses. Courses included: Electricity; Machine Shop; Aircraft Construction; Engine Assembly; Material Specifications and Blue Print Reading; Aircraft Instruments; Engine Accessories; Aircraft Welding; Aero Drafting; Aircraft Repair; Sheet Metal; Aerodynamics; Instrument Repair; and Metallurgy; as well as Conference Methods and Employment Problems, which involved helping students present materials and gain employment.

Aviation assembly room. [1942]

The vocational aviation mechanics program at Western State Teachers College continued to grow and by 1942 the program added "When educational qualifications permit, the combination of pilot and mechanic is possible by enrolling in the vocational pilot training program sponsored by the Civil Aeronautics Administration." Thus, began the flight training portion of WSTC's program for enlisted men in the Naval Cadet Reserve. Additionally, courses expanded to include: Aero Mathematics and Heat Treat.

In 1943, the vocational aviation mechanics two-year program (now a part of Western Michigan College of Education) prepared students, when licensing requirements were met, for positions as trained airplane mechanics, licensed engine mechanics, and airplane factory mechanics. Special consideration was given to young men desiring to prepare for specialist mechanic ratings available in the Air Forces of the Army and Navy prior to induction. Special preparation was given for service and maintenance positions with airlines, repair depots, and commercial and private owners of aircraft. The program showcased a "modern, well-equipped, government-approved repair station located in the Mechanical Trades Building". Specialist ratings could be acquired in machine shop, sheet-metal, welding, hydraulics, propellers, instruments and aircraft radio. Also, students who were recommended could sit for the governmental-sponsored examinations for the airplane mechanic's or the airplane-engine mechanic's license.

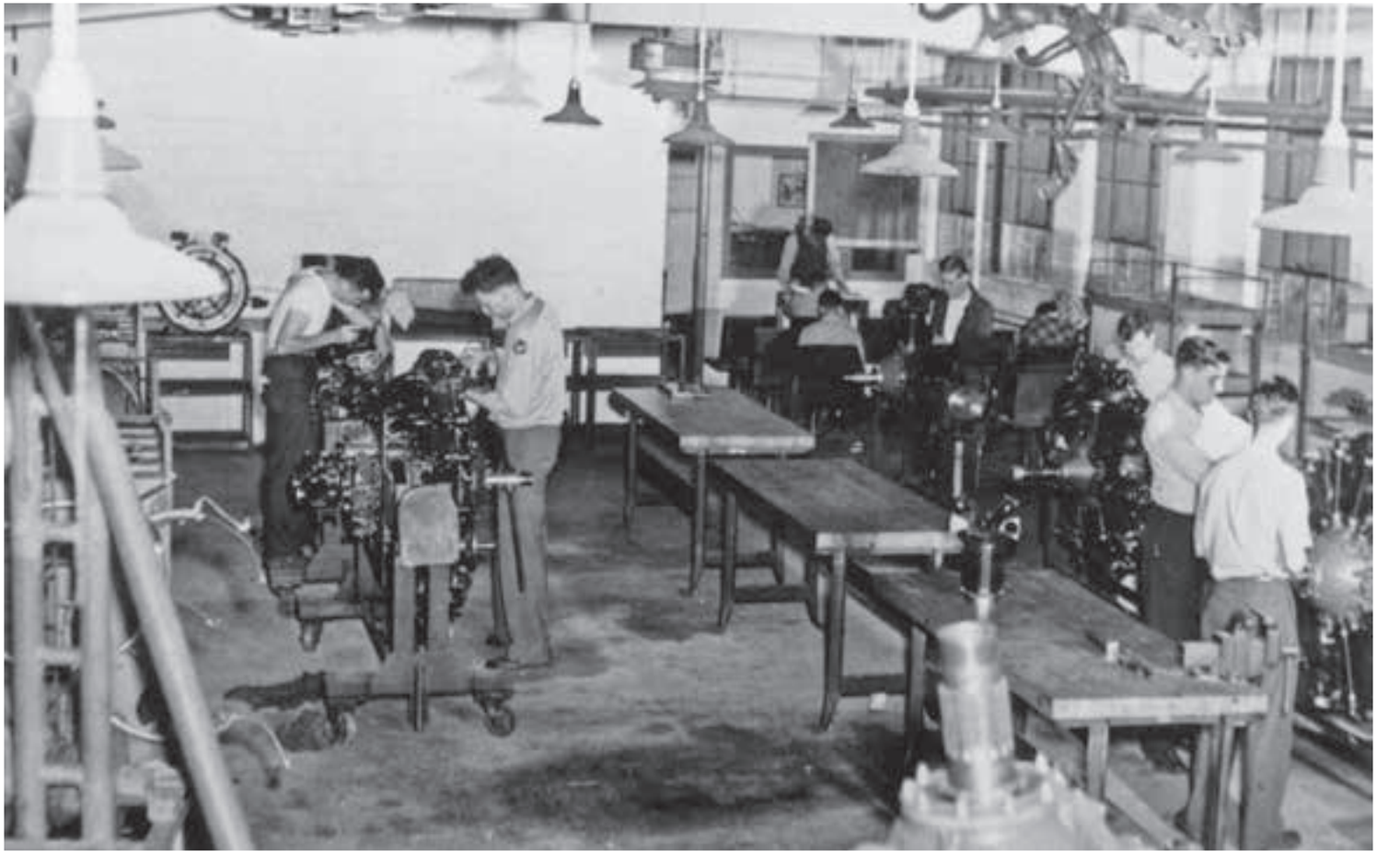
In 1944, two courses were added to the program: the primary pilot training ground school and the advanced pilot training ground school.

In 1945-1946, lab fees for the aircraft mechanics program were increased to $35 each semester. There were now separate curriculums for airplane mechanics (32 credit hours) and engine mechanics (31 credit hours). Courses began to expand to include: Engine Assembly and Disassembly; Civil Air Regulations and Theory of Flight; Ignition and Accessories; Carburetion and Lubrication; and Pilot Training. The lab fee for the private pilot certificate included 30-40 hours dual and solo training, including flight test for $325. Flight training was conducted by Western Michigan Flying Service, Inc., at the Kalamazoo Municipal Airport.

1947 brought the first course in simulation with Link Operation. This course covered basic flight maneuvers, radio range orientation, navigation, and airway traffic control procedure. This year also saw the genesis of the Sky Broncos. This organization provided opportunity for actual flying experience at a minimum cost to its members and for studying all subjects relating to aviation, particularly those courses prescribed by the Civil Aeronautics Administration as essential for a pilot's certificate. The program changed names to aircraft mechanic and air transportation, which then encouraged all students to take pilot training and flight theory. Entrance requirements into the newly named program now was any high school graduate meeting regular college entrance requirements.

1948 brought out a major change in the aviation program at Western. Three programs were now delineated: air transportation, aircraft mechanics, and airline hostess curriculum.

Air transportation was a four-year course leading to a bachelor of science degree, designed to train students to manage and operate airports and various administrative, supervisory, and sales positions in the business field of aviation. This curriculum required concentration in mechanics, pilot training, business administration, and airport operation. Students could meet the requirements for a CAA airplane and engine mechanics license as well as 35 hours of flight training for a private pilot's license. The aircraft mechanics curriculum was a two-year program for students looking to work in service and maintenance positions with the airlines,



Beginning Aircraft Engine Class. Paul Amerpohl, instructor. [1947]

Top: Air trainers parked in front of the Mechanical Trades Building were part of the "Ground School" for the Civilian Pilot Training Program. [1950]

Left: General Electric jet engine. [1950]

repair depots, and commercial and private owners of aircraft. Finally, the airline hostess curriculum was a three-year program for women desiring a practical educational background to qualify for airline hostess employment with commercial airlines was added. In addition to being a high school graduate, candidates for this program were required to meet special airline physical requirements pertaining to height, weight, eyesight, voice, and appearance. In addition to the existing courses, new courses were: Elementary Aviation; Engine Overhaul; Aviation Education for Teachers; Model Airplane Construction; Radio Communications; Meteorology and Navigation; Airport Selection and Layout; Air Traffic, Cargo and Sales; Airport Management; and Control Tower Operation.

In 1951, the airline hostess program became a bachelor of science degree; the aircraft mechanic's program was now called aircraft maintenance engineering, while the bachelor of science degree in air transportation stayed the same. In 1958, the aircraft maintenance technology program in the Industrial Technology Department of Western Michigan University included pilot training and aircraft servicing at the Plainwell-Otsego Airport, which boasted well-equipped shops, complete airplane service, and university owned and licensed aircraft.

In 1959, the School of Applied Arts and Sciences housed the transportation bachelor of science degree that had two options. Option 1, the air transportation program was designed to train people for various positions in the airlines and aircraft industries; Option 2, the automotive transportation program was designed to train people for the automotive transportation industry. The aircraft and aircraft engine technology program remained a two-year certificate program.

Lester M. Zinser, Director of Aviation. [1966]

Between 1960 to 1962, the Engineering & Technology department in the School of Applied Arts & Sciences offered a two-year aircraft and aircraft engine technology program that could be applied to the four-year aviation engineering technology degree.

Course offerings included: Airframes; Aircraft Welding; Powerplants; Introduction to Aviation; Private Pilot Training; Commercial Pilot Training; Aircraft Servicing; Passenger and Freight Traffic; Jet and Rocket Power Plants; Aeronautical Navigation; Aeronautical Meteorology; Airline Operations; Airline Administration.

From 1962 to 1968, not much changed in the aviation-centered programs. However, in 1968 transportation technology became its own department in the School of Applied Arts and Sciences. The transportation technology department offered both a four-year program in automotive and aviation engineering technology and a two-year program in automotive and aircraft technology and pilot training.

In 1969, the Transportation Technology department separated automotive and aviation. This separation left the bachelor's degree in aviation engineering technology program with three options: 1) management and transportation; 2) production and testing; and 3) professional pilot. The department also continued to offer the two-year aircraft technology program.

Between 1970 and 1973, little changed in the aviation programs. In 1973, the Department of Transportation Technology in the College of Applied Science now offered bachelor of science degrees in aviation engineering technology; aviation technology and management; and flight technology. Aircraft technology continued to be a two-year program.

In 1974, the Air Force ROTC program was initiated in the Department of Transportation Technology, which was located in the College of Applied Sciences. The AFROTC program was designed to provide skills and knowledge needed to perform effectively as a professional officer in the Air Force. The program on Western's campus was operated as a satellite of the AFROTC detachment at the University of Michigan in Ann Arbor.

By 1977, the two-year program in aircraft technology was no longer offered, and only four-year degree programs were offered in aviation: aviation engineering technology; aviation technology and management; and flight technology.

In 1983, the Department of Transportation Technology now belonged to the College of Engineering and Applied Sciences, offering bachelor of science degrees in aircraft engineering; aviation technology and operations with three options: 1) technical management leading to careers in technical sales or service, production, and general aviation management;

Flight Operations and Administration, Battle Creek, Michigan.

2) professional pilot option producing general aviation pilots who are competitive in both technical and business backgrounds; and 3) aviation maintenance management that emphasized aircraft systems; reliability and maintainability; licensing requirements; and repair facility management.

In 1989, a special program sponsored and approved by the Federal Aviation Administration in Airway Science Management was available for students who were enrolled in either the technical management or professional pilot options of the Aviation Technology and Operations curriculum.

1993 saw the establishment of Aviation Sciences, which became an academic unit in the College of Engineering and Applied Sciences. It offered bachelor's degrees in aviation technology and operations with an option in technical management and an option in professional pilot and aircraft maintenance engineering technology. The special program sponsored by the FAA in Airway Science Management was still available.

The mid-1990s saw a tremendous amount of growth and change for the aviation programs. In 1995 the academic unit Aviation Sciences became the School of Aviation Sciences in the College of Engineering and Applied Sciences, in 1998 the School of Aviation Sciences became the Department of Aviation in the College of Engineering and Applied Sciences, and in 1999 the Department of Aviation split from the College of Engineering and Applied Sciences to become the seventh College at Western Michigan University: the College of Aviation.

In 1999, the College of Aviation became home to the International Pilot Training Centre. This program contracted with British Airways, Aer Lingus

Dave Thomas and IPTC cadets. [1999]

Piper Aztec modified for maintenance training. [1989]

Dr. Curtis "Doc" Swanson and maintenance students. [2001]

Engines laboratory. [2005]

and the Emirates Air to train selected students to become professional pilots.

For 18 months, these cadets lived and studied in Battle Creek to receive their private, instrument and commercial pilot rating and certificates. Upon completion, they became first officers with their respective airlines. More than 250 cadets from England, Ireland, the United Arab Emirates, and other European countries learned to fly at WMU's College of Aviation, leaving the University's mark as a global trainer of professional pilots.

Since 1999, there have been name changes and option changes within the programs, but they have all remained focused on three areas: flight; maintenance; and management. Currently, the College of Aviation is home to three bachelor-degree programs: aviation flight science, aviation maintenance technology, and aviation management and operations.

In fall 2011, the College of Aviation began offering an initiative called the Air Traffic Collegiate Training Initiative program. The COA was asked to join the FAA's AT-CTI network as one of 36 schools in the nation to offer this training. Graduates of the AT-CTI program were eligible to bypass the Air Traffic Basics Course, which was the first five weeks of qualification training at the FAA Academy in Oklahoma City. Unfortunately, this program was short-lived because the FAA changed the way it selected ATC candidates in early 2014.

In fall 2014 the College of Aviation began its first collaborative master's program with the College of Business, an MBA with an aviation emphasis.


WMU
COLLEGE OF AVIATION
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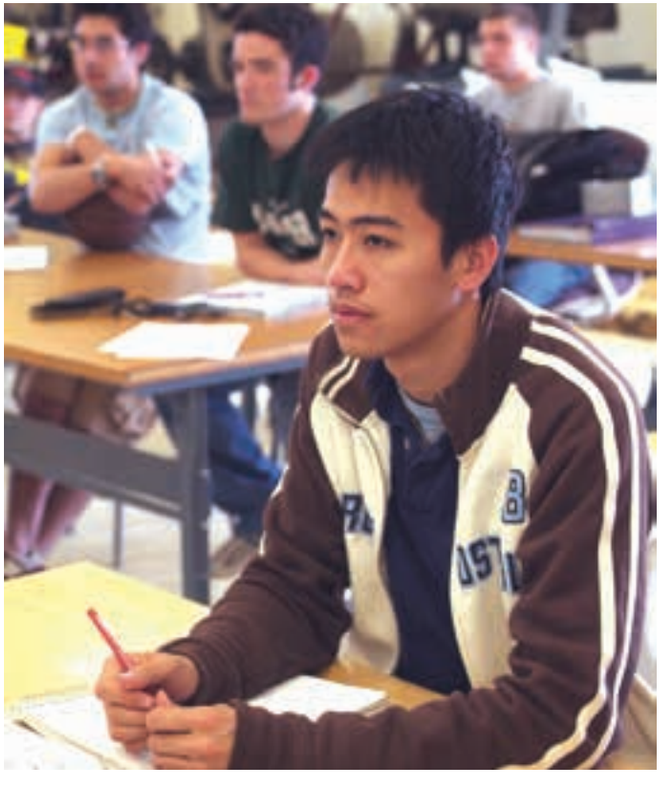
258



Students in maintenance class. [2006]

Jeremy Heirholzer, Faculty Specialist II with maintenance student. [2013]

Left: Aviation students. [2013]

Elmer C. “Buck” Weaver, the Father of Aviation Training and Education at Western, was the primary instructor when the College of Aviation was first formed in 1939.

CHAIRS

Robert Aardema
Harley Behm
Deyo B. Fox
Joseph W. Giachino
Andrew C. Luff *(Acting)*
William Rantz
Gilbert Sinclair
Fred Sikins *(Interim)*
Curtis N. Swanson

DIRECTOR

Joseph H. Dunlap, *1991-1998 Director of the Program of Aviation Sciences and of the School of Aviation Sciences*

DEANS

Robert J. Aardema *(Interim)*
Gregory A. Lyman
Rick Maloney
Dave Powell
Dave Thomas *(Interim)*
Richard Wright

FACULTY

Elmer C. Weaver
Robert Aardema
Paul M. Amerpohl
Thomas Armstrong
Blair Balden
Heber B. Bender
Patrick A. Benton
G. Wayne Blaisdell
Stanley F. Bloyer
Timothy Broadwater
Lori Brown
Robert Bunday
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Ian Davidson
Thomas L. Deckard
Mervin Elliott
Herbert E. Ellinger
Felix Esquibel
Joseph W. Giachino
Martin Grant
Amanda Gruden
Stephen Hasenick
Jeremy Hierholzer
Kevin High
Arthur W. Hoadley
Willem Homan
Forrest O. Hutchins
LaVerne M. Krieger
Homer G. Kuiper
Herman W. Linder
Michael Ludwiczak
G. Patrick Langworthy
Dennis McFall
Thomas McLaughlin
Terrence Michmerhuizen
George R. Miller
R. Miller
Mark Murphy
Dominic Nicolai
Daniel E. Peacock
Maureen Petitt
John H. Plough
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Ronald L. Sackett
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Curtis N. Swanson
Raymond Thompson
Steven Tkachuk
David Thomas
Dennis W. Traynor
Clarence VanDeventer
Jay Waakes
Geoffrey Whitehurst
Lisa Whittaker
James Whittles
William Wichers
Harry R. Wilson
Ralph O. Williams
Ronald O. Williams
Leard L. Wylie
Lester Zinser

FACULTY MEMBERS

Quality instruction is the mainstay of any collegiate program. Faculty are the ones who make an indelible impact on the young minds of students as they study for the career of their choice. At left is a list of faculty who have joined the aviation programs since their inception at Western State College in 1939 and continuing to today in the College of Aviation at Western Michigan University.

Our sincere apologies if we have missed someone.

HISTORY OF STUDENT ORGANIZATIONS

Many registered student organizations at Western Michigan University are affiliated with the College of Aviation. These organizations allow students to socialize with others in their chosen field as well as participate in aviation-related events, such as seminars, career explorations and more.

THE AIR TRANSPORTATION CLUB

The Air Transportation Club was formed in 1951 and provided a medium through which students in the air transportation curriculum may supplement their classroom work. Various representatives from the aviation industry regularly speak to club members on various related subjects, giving them an insight into the practical side of aviation.

SIGMA ALPHA TAU

Sigma Alpha Tau was a national honorary fraternity in the field of air transportation. On Dec. 13, 1950, the Beta Chapter was installed at Western Michigan College and 12 charter members were presented their keys. The fraternity was limited to juniors and seniors who are in the top 25 percent of their class. The objectives of Sigma Alpha Tau were to promote air transportation in colleges and universities and within the transportation industry; to promote aviation in general through unified effort on the part of all concerned; and to foster and develop high moral character, integrity, and leadership. On April 8, 1967, the organization became Alpha Eta Rho, which continues as an active student organization in the College of Aviation today.

ALPHA ETA RHO

Alpha Eta Rho is a professional aviation business fraternity. The fraternity was founded on April 10, 1929, at the University of Southern California. Since 1929, there have been more than 140 chapters established across the country and even internationally. Western Michigan University is home to Theta chapter and is one of the College of Aviation's registered student organizations. The Theta chapter was founded on April 8, 1967. Since then the chapter has grown substantially to exceed 120 members and recruits incoming freshmen both fall and spring semester. Members are comprised of all three aviation majors as well as non-aviation majors. Throughout the year, Theta chapter stages a formal dance, volunteer activities, ski trip, and participates in the University's soapbox derby race. Every other Sunday, Theta Chapter invites a professional in the aviation industry to come and speak to the members. In 2013, the Theta Chapter hosted the Alpha Eta Rho National Conference.

AVIATION STUDENT COUNCIL

The Aviation Student Council was established in 2006 to serve the student body of the College of Aviation at Western Michigan University by voicing student opinions to the College of Aviation administration, fostering the collaboration of College of Aviation students, faculty, and administrative staff to improve the college in any and all aspects proposed by the students, faculty, and administrative staff, organizing and engaging in college-wide events to foster and promote aviation education as well as socialization and networking between students of different aviation disciplines, and organizing and engaging in student outreach and recruitment activities.

Since its inception, the members of the ASC have shepherded a number of endeavors through the Western Student Association, including major WSA reforms that allow for fair allocations from student fees to registered student organizations and the funding of the college bus system.

MULTICULTURAL ASSOCIATION OF AVIATION PROFESSIONALS

The Multicultural Association of Aviation Professionals is a non-profit, student-run organization in the College of Aviation. It was founded to unify underrepresented students in the college. The purpose of MAAP is to enhance, promote, and educate the multicultural aviation community. That is accomplished by fostering a strong support system between the educational and professional environments in the field of aviation. In addition, MAAP members are also involved in community outreach with a special emphasis on mentoring the youth in the local community by exposing them to career opportunities in the field of aviation so their potential can be reached to the fullest.

PROFESSIONAL AVIATION MAINTENANCE ASSOCIATION

The purposes of the Professional Aviation Maintenance Association are to promote a high degree of professionalism among aviation maintenance personnel, to foster and improve methods, skills, learning and achievement in the field of aviation maintenance, to conduct national, state, and local meetings and seminars, to recognize achievement in our field, to publish, distribute and disseminate news, technical bulletins, journals and other appropriate publications dealing with the trade of aviation maintenance, to collaborate with other organizations in aviation and to address the queries of governmental agencies pertaining to maintenance rules and guidelines.

The WMU student chapter of PAMA was formed in the early 1990s. This organization gives all students from the College of Aviation an opportunity to be exposed to the maintenance industry and servicing of the various aircraft that WMU has to offer. In the 30-plus years of existence PAMA has enjoyed a varied level of student involvement and activity. Numerous field trips to local companies such as Parker Hannifin Fluid Power (formerly National Waterlift) and Duncan Aviation (formerly Kal-Aero) were organized. Some of the major field trips PAMA students have taken were to Wright Patterson AFB, Delta Tech Ops (Detroit) and the PAMA national convention in Cincinnati. The group also hosted a variety of guest speakers from those and other similar companies. The student chapter is currently not active.

WOMEN IN AVIATION

Western Michigan University's Women in Aviation student organization is a local chapter of Women in Aviation, International. The College of Aviation originally started the chapter in January of 2000. Previous activities include attending the WAI Conference, tower tours, and holding aviation day camps at the Battle Creek Kellogg Airport, selling lunches at the airport, and many others. Women in Aviation, International began in 1990, and was formally established in 1994 to encourage women to seek opportunities in aviation. It is a nonprofit organization dedicated to the encouragement and advancement of women in all aviation career fields and interests. They provide year-round resources to assist women in aviation and to encourage young women to consider aviation as a career. WAI also offers educational outreach programs to educators, aviation industry members, and young people nationally and internationally.

SKY BRONCOS

The first aviation club formed on the campus of Western Michigan College was organized in November 1946. The name "SKY BRONCOS" was adopted. The organization provided opportunity for actual flying experience at a minimum cost to its members and for studying all subjects relating to aviation, particularly those courses prescribed by the Civil Aviation Authority essential for a pilot's certificate. Officers were Reid Arnold, president; Betty Lange, vice president; Virginia Jansen, secretary; and Donna Dobson, treasurer. The main activity of the Sky Broncos was flying a Piper Cub obtained from the Aviation Department of Western Michigan College. Later they also had the use of an Aeronca Chief. Members of the Sky Broncos held licenses ranging from student pilot to instructor.

In 1947, formal membership with the National Intercollegiate Flying Club was arranged. A team of four members of the Sky Broncos participated in the first post-war National Intercollegiate Air Meet at the Ann Arbor Municipal Airport. This team came away with its first national championship.

The Sky Broncos have continued to participate in regional and national competitions at times hosting both during almost seven decades the organization has been in existence. They have brought home four more national championships and many regional championships in the National Intercollegiate Flying Association's collegiate flight competitions.

SkillsUSA WMU

SkillsUSA WMU

The College of Aviation at Western Michigan University started a chapter of SkillsUSA in the fall of 2012. SkillsUSA is a national organization founded in 1965 as the Vocational Industrial Club of America. Its national membership totals 300,000 high school and post-secondary students and instructors. At the core of SkillsUSA are local, state and national contests in 99 different categories ranging from 3-D visualization and animation to welding. The College of Aviation's chapter of SkillsUSA participates in the Aviation Maintenance Technology competition. Each year SkillsUSA holds the National Leadership and Skills Conference where students compete for the national championship in their respective skill. In June of 2013, Andrew Kincaid won the national championship in the Aviation Maintenance Technology competition.

For the last two years the College of Aviation has held a contest in the spring to determine who will compete in the SkillsUSA national championship. In March of 2014, this contest earned the distinction of being the official SkillsUSA state championship for aviation maintenance technology. With that designation, Snap-On tools sponsored the event by donating tool sets to the top three finishers.


WMU

HISTORY OF OUR CHAMPIONS

The Western Michigan University College of Aviation regularly participates in a variety of competitive events. These include The Sky Broncos, Air Race Classic and SkillsUSA. By taking part in these events, our students demonstrate their considerable skills and continue to add to our college's winning reputation.

THE SKY BRONCOS

The National Intercollegiate Flying Association exists as a forum for collegiate aviators to expand their studies and further their careers by participating in competitive and non-competitive events, networking with industry and contemporaries, and applying themselves to go above-and-beyond their ordinary curriculum. The organization traces its roots to May 8, 1920, when nine schools competed in four events at Mitchel Field on Long Island as the Intercollegiate Flying Association.

Western Michigan College (as it was known then) began competing in 1947, and won the National Championship both in 1947 and 1948. The 1947 team included: Virginia Jansen, Betty Lange, Loyal Bearss, Gil Somers, John Althouse, and Reid Arnold. Interestingly, most of the competitors on the flight team were recent World War II pilots looking to earn their bachelor's degree from WMC. During a time when women were not routinely seen in aviation, Western's first Sky Broncos team consisted of two female students who helped establish the organization. Three of the four original officers of the club were female (vice president; secretary and treasurer).

Over the years WMU continued to participate in the National Intercollegiate Flying Association's competition with sporadic lapses in attendance. And it took 35 years for Western to bring home another National Championship. The 1983 team won both flight and ground events to earn the National Championship and it took the tradition of strong performing females to do it. WMU's sole female competitor earned a third-place finish in the Women's Achievement Award.

Bottom: Sky Bronco Champions [1947]

Top: Sky Bronco Championship Team [1948]

It took 15 years for Western to bring home another National Championship in 1998. The 1998 team consisted of 13 members including three women. This team also won flight events and took second place in ground events but had enough points to win the overall National Championship. Jennifer Richard was the overall competition's top pilot beating out both male and female competitors to earn the top honors and propelling her team to a National Championship.

This time, it did not take long (only four years) for Western to bring home their fifth National Championship. The 2002 team consisted of 19 team members including two female members. This team was first in ground events and took second place overall in flying events, but had enough points to win the overall National Championship. Ken Rosengren won overall top pilot, beating out both male and female competitors to earn the honors and bring home another National Championship.

The Sky Broncos continue to compete strongly at both regional and national levels, and with a fourth-place overall finish in 2014, and a second-place finish in overall flying events, the team is poised and ready to take another National Championship!


N3258V

Top: Sky Bronco Championship Team [1983]

Middle: Sky Bronco Championship Team [1998]

Bottom: Sky Bronco Championship Team [2002]

Left: One of the two Cessna 150 aircraft used by Sky Broncos in competition. [2013]

WMU SKY BRONCOS PRECISION FLIGHT TEAM COMPETITION RESULTS

COMPETITION SEASON	REGIONALS	NATIONALS
1946-1947	—	1st
1947-1948	1st	1st
1948-1949	1st	2nd
1975-1976	1st	—
1976-1977	1st	—
1977-1978	1st	—
1978-1979	—	3rd
1982-1983	—	1st
1985-1986	—	6th
1986-1987	—	7th
1987-1988	2nd	4th
1988-1989	2nd	9th
1989-1990	—	9th
1990-1991	—	16th
1991-1992	2nd	2nd
1992-1993	2nd	3rd
1993-1994	1st	2nd
1994-1995	1st	3rd
1995-1996	1st	2nd

COMPETITION SEASON	REGIONALS	NATIONALS
1996-1997	1st	3rd
1997-1998	1st	1st
1998-1999	1st	3rd
1999-2000	1st	2nd
2000-2001	2nd	2nd
2001-2002	1st	1st
2002-2003	1st	3rd
2003-2004	1st	2nd
2004-2005	1st	3rd
2005-2006	1st	3rd
2006-2007	1st	4th
2007-2008	1st	4th
2008-2009	2nd	3rd
2009-2010	1st	7th
2010-2011	2nd	4th
2011-2012	1st	4th
2012-2013	3rd	5th
2013-2014	1st	4th

WMU COLLEGE OF AVIATION WOMEN PILOTS HAVE COMPETED IN THE AIR RACE CLASSIC EVERY YEAR SINCE 2000, WITH THE EXCEPTION OF 2009-2013.

Kelly Burris, a 1988 WMU graduate with a degree in aeronautical engineering, won the Air Race Classic in 2009. Her co-pilot was Erin Recke. Burris piloted her 1962 Beechcraft Debonaire aircraft to the win. Kelly Burris received her pilot training at WMU while pursuing her bachelor's degree. She is currently a patent attorney and handles hundreds of patent issues involving aviation.

2000
- Jennifer Richard, 1998 alumna
- Jo-Elle Warner, 2000 alumna

AIRCRAFT: Mooney Ovation

2001
- Jo-Elle Warner, 2000
- Michelle Homister, 2001

AIRCRAFT: Mooney Ovation

2002
- Michelle Homister, 2001
- Michelle Glisan, 2003

AIRCRAFT: Mooney Ovation

2003
- Michelle Glisan, 2003
- Amanda J. Gruden, 2000

AIRCRAFT: Mooney Ovation

2004
- Amanda J. Gruden, 2000
- Sarah Tower, 2003

AIRCRAFT: Cessna 172

Overall Finish: 10th of 33 teams

Collegiate Finish: 2nd of 4 teams

2005
- Sarah Tower, 2003
- Erica Ebenhoeh, 2004

AIRCRAFT: Cessna 172

Overall Finish: 8th of 40 teams

Collegiate Finish: 1st

2006
- Courtney Hedlund, 2004
- Leslie Treppa, 2005

AIRCRAFT: Cirrus SR20

Overall Finish: 4th of 32 teams

Collegiate Finish: 2nd

Award: Mary Pearson Award for highest overall finish among the seven entries composed of first-time participants

2007
- Jennifer Jakubiec, 2007
- Alison Pierce, 2007

AIRCRAFT: Cirrus SR20

Overall Finish: 12th of 46 teams

Collegiate Finish: 2nd of 7 teams

2008
- Meghan Burlager, 2007
- Betsy Taylor, 2009

AIRCRAFT: Cirrus SR20

Overall Finish: 11th of 34 teams

Collegiate Finish: 2nd of 3 teams

Awards: Leg Prize for the top score on the third leg of the race

2014
- Sara Karsten, 2011
- Elizabeth Howerton, 2014

AIRCRAFT: Cirrus SR20

Overall Finish: 21st of 47 teams

Collegiate Finish: 6th of 8 teams

AIR RACE CLASSIC

The Air Race Classic, part of a long tradition of women's air races, dates to 1929. Air racing became popular in the 1920s, but women pilots were forbidden to race against men. They started their own competition. The race is billed as "the only all-woman, cross-country event." Entrants fly under visual flight rules during daylight hours and all fly fixed-wing aircraft. Since many types of planes are used to compete, each plane is given a handicap speed based on its capabilities. The goal is to have the actual ground speed be over the handicap speed as much as possible.

Top: Courtney Hedlund and Leslie Treppa [2006]

Bottom Left: Amanda J. Gruden and Sarah Tower [2004]

Bottom Right: Sarah Tower and Erica Ebenhoeh [2005]

LEFT PAGE
Top: Jennifer Jakubiec and Alison Pierce [2007]

Middle: Meghan Burlager and Betsy Taylor [2008]

Bottom: Sara Karsten and Elizabeth Howerton [2014]

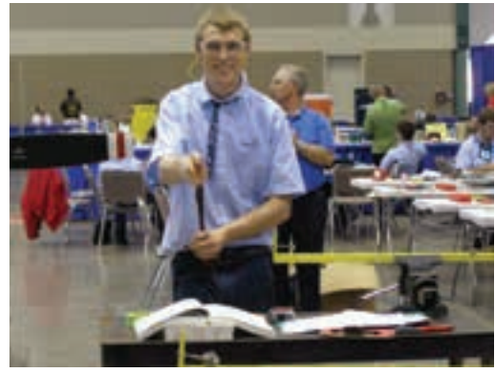
Andrew Kincaid, National SkillsUSA Champion. [2013]

SkillsUSA WMU NATIONAL, STATE CHAMPIONS

SkillsUSA is a national organization founded in 1965 as the Vocational Industrial Club of America. Its national membership totals 300,000 high school and post-secondary students and instructors. At the core of SkillsUSA are local, state and national contests in 99 categories ranging from 3-D visualization and animation to welding. The College of Aviation's chapter of SkillsUSA participates in the Aviation Maintenance Technology competition. Each year SkillsUSA holds its National Leadership and Skills Conference where students compete for the national championship in their respective skill. In 2013, Andrew Kincaid won the national championship in the Aviation Maintenance Technology competition.

Kincaid was one of six participants from around the nation recognized for this skill set—and one of only two in this category who took home top Gold honors—during the weeklong event in Kansas City, Mo. This is the first year a WMU student entered the competition. Kincaid joined more than 5,900 other career and technical education students who competed in 98 trade, technical and leadership fields during the weeklong event. His three advisors at the University were Jeremy Hierholzer, Gail Rouscher, and Terry Michmerhuizen.

Working against the clock and each other, participants prove their expertise in job skills in electronics, technical drafting, precision machining, medical assisting and culinary arts. There were also competitions in leadership skills, such as extemporaneous speaking and conducting meetings by parliamentary procedures.



Alan Tallos, State SkillsUSA Champion. [2014]

Aviation maintenance technology contestants perform 12 tasks that represent the types of maintenance they will handle in the aircraft industry. The contest scope is consistent with the airframe and power plant mechanics certification guide published by the Federal Aviation Administration. Aviation maintenance is the only such profession certified by the federal government.

WMU SkillsUSA CHAMPIONS

2013 STATE CHAMPION
Joseph Cugnetti

2013 NATIONAL CHAMPION
Andrew Kincaid

2014 STATE CHAMPION
Alan Tallos

THE HALL OF HONOR

Going above and beyond one's potential is a founding principle of the Western Michigan University College of Aviation's Hall of Honor. The members of this distinct group have made a lasting impact on the world of aviation and Western Michigan University. Although it is easy to reach new heights in the field of aviation, it takes a person of vision, determination, and drive to leave a legacy felt by generations to come.

2010 INDUCTEE

ELMER CLARE "BUCK" WEAVER

Pilot, Mechanic, Teacher, WMU Faculty Member

Buck Weaver attended high school at the Western Normal School of Kalamazoo. As a student his talents were recognized and upon graduation in 1917, Buck was offered a job teaching metal work. Buck answered a call to military service and in March of 1918 entered the U. S. Army Signal Corps, Aviation Section. In 1926, Buck earned both his pilot and mechanic licenses. In 1939, Western established the Department of Vocational Aviation, listing Elmer C. Weaver as the sole faculty member. Between 1941 and 1945, Buck was the program coordinator for both civilian and military pilot training. After the war, he returned to classroom teaching. He retired from WMU in 1956 after 37 years of service.

2010 INDUCTEE

THOMAS L. DECKARD

WMU Faculty Member and Flight Instructor, USAF Instructor Pilot

After serving as a T-38 instructor pilot in the U.S. Air Force, Tom Deckard joined the faculty of WMU's Transportation Technology Department in 1974. He was initially assigned to teach flight and ground instruction in the aviation program. Throughout his 30 years of service to WMU, he also served as the Transportation Technology Department Chair, College of Aviation Faculty Chair and Director of Flight Education. Mr. Deckard advised students in all of the flight curricula as well. He is a recipient of the Teaching Excellence Award and the FAA Grand Rapids District Flight Instructor of the Year Award. Tom's commitment and dedication to students was never in doubt. He is highly regarded by past graduates as "the best" the aviation program could offer.

2010 INDUCTEE

SUZANNE UPJOHN DELANO PARISH

Aviatrix, Kalamazoo Area Philanthropist

Since becoming a pilot in 1942, Sue Parish continues to pursue her lifelong passion for flying. An early member of the Women Air Force Service Pilots (WASP), Sue was awarded a Congressional Gold Medal by Act of US Congress in spring 2010 for her service as a WASP in WWII. In her illustrious career, Sue co-owned Kal-Aero and later co-founded the Kalamazoo Air Zoo. She flew her signature pink P-40 Warhawk aircraft for more than a decade and performed routinely in air shows throughout the United States. The first woman inducted into the Experimental Aircraft Association Warbird Hall of Fame, Sue is also an inductee of the Michigan Aviation Hall of Fame. A longtime supporter of the WMU College of Aviation, Sue's turboprop 425 Conquest flew many WMU presidents to destinations far and wide. The college has benefited greatly from her philanthropic support as well as the inspiration she provides to aviators of all ages.

2011 INDUCTEE

JEFFREY A. HANEY

WMU Alumnus and
Flight Instructor,
USAF Fighter Pilot

Jeff Haney graduated from WMU in 2002 as a standout member of the Sky Broncos Precision Flight Team. During his four years on the flight team, he earned numerous individual honors including Top Pilot in the region in 2001. In his senior year, Jeff was a team captain and voted outstanding team member while leading the Sky Broncos to their 2002 National Championship. Jeff served as a flight instructor for WMU before his acceptance into the United States Air Force for pilot training in 2003. Jeff received two Distinguished Graduate awards during USAF pilot training in addition to numerous other honors and distinctions. His superior skills and accomplishments earned Jeff coveted selections to fly both the F-15C Eagle and F-22 Raptor, two of the USAF's top fighter aircraft. Jeff has exhibited exemplary leadership, character, integrity, and dedication to both WMU and his country. His lead-by-example manner, positive attitude and welcoming personality make him a respected and inspiring role model.

2011 INDUCTEE

LARRY HOIKKA

WMU Alumnus, WMU
Aircraft Mechanic and
Maintenance Supervisor

Larry Hoikka left his small town of Crystal Falls, MI. in 1958 to attend the WMU Aircraft Maintenance Technology program in the big city of Kalamazoo. He earned his Airframe and Powerplant certificate in 1961 and soon began repairing and inspecting airplanes for local fixed base operators. In 1965, after serving in the Coast Guard, Larry began working for WMU as the aviation program's chief mechanic. Over his 30 years of service, Larry established and maintained an outstanding aircraft safety record. As a student he was a member of the Sky Broncos and later served as the precision flight team's coach, leading it to a National Championship in 1983. Larry also taught classes for both pilot and mechanic students. He personified reliability, top-quality performance and served as a mentor and inspiration to all those who worked for him or with him.

2011 INDUCTEE

RONALD L. SACKETT

WMU Alumnus,
WMU Faculty Member
and Coordinator of
Flight Instruction

Ron Sackett graduated from WMU in 1959 with a Bachelor of Science in Air Transportation. He taught secondary education for three years and then worked as a technical writer for Lear Siegler in Grand Rapids, MI. Ron returned to WMU in 1966 as an instructor in the Transportation Technology Department and was promoted to Assistant Professor in 1972. He was appointed as the Coordinator of Flight Instruction in 1973, a position he maintained until his retirement from WMU in 1999. Ron was selected as the FAA Grand Rapids Accident Prevention Counselor of the Year in 1979, and in 1987 he was selected as the FAA District and Regional Flight Instructor of the Year. Ron skillfully incorporated and shared his passion for aviation with students throughout his career at WMU. Ron also conducted numerous check rides as an FAA Designated Pilot Examiner well into his retirement.

2011 INDUCTEE

LESTER M. ZINSER

WMU Chief Flight Instructor and Director of Aviation, Research Pilot

After flying B-25s, B-24s, and B-29s during World War II, Lester Zinser received a Master of Education with an emphasis on human factors from the University of Illinois. In the fall of 1957, Lester arrived at WMU assuming the role as the aviation program's first Chief Flight Instructor. With only a pot belly stove in his office, Lester began his WMU influence teaching 12 students and flying three Piper J5s out of the Plainwell airport. Under Lester's guidance, the program grew, eventually moving to Kalamazoo's airport. In addition, Lester served as the Sky Broncos coach from 1958 to 1966, taking the team to many air meets and earning numerous awards. In 1966, Lester joined the National Center for Atmospheric Research where his flying skills enabled researchers to study a variety of weather situations, including small volcanic eruptions and pre-hurricane conditions. Lester's hard work, dedication and guidance helped to lay the foundation for the university's Flight Science Program.

2012 INDUCTEE

SIDNEY ADAMS JR.

Battle Creek Community and Aviation Advocate, WMU Adjunct Assistant Professor

Born in rural Mississippi, Sid Adams propelled his life from humble beginnings to earn a degree from Alcorn State University, serve in the US Army and dedicate 29 years with the Veterans Administration. The youngest of 11 children, Sid's love of aviation took off during his tenure as an 82nd Airborne paratrooper. Eventually earning his private pilot license and becoming an aircraft owner himself (Cessna Cardinal N13282), Sid became determined to pass on his passion of aviation to the next generation, specifically traditionally under-represented groups. In addition to his career with the VA, Sid became intimately involved in numerous city and national organizations: the NAACP, the Organization of Black Airline Pilots, Battle Creek Unlimited, the Battle Creek Tax Increment Finance Authority, WMU's College of Aviation Advisory Board, the Michigan Aeronautics Commission, and numerous others. Parlaying his talents and passion, Sid took part in the committee to help establish the College of Aviation at its permanent home in Battle Creek, MI. Furthermore Sid helped to establish the Battle Creek Flight Academy, with the mission of introducing aviation careers and opportunities to women and minorities.

2012 INDUCTEE

PATRICK D. SCHIFFER

WMU Alumnus, Assistant Professor and Chief Flight Instructor

Prior to graduating from WMU in 1960, Pat Schiffer had already begun to leave his mark in aviation. Even before accepting his diploma, Schiffer was hired as the aviation program's second flight instructor, and soon rose to the positions of WMU Chief Flight Instructor and Assistant Professor. Prior to his WMU tenure, Pat had served in the Army in WWII, learned to fly a Stearman on the Michigan family farm, and trained Air Force pilots to fly AT-6s, T-28s and T-34s during the Korean War. Schiffer devoted himself to WMU's aviation program, teaching almost every class and countless students, while working tirelessly to enhance the program through his 23 years of service as an FAA Designated Pilot Examiner and FAA Safety Counselor. With over 27 years of

support and commitment to WMU's program, Pat was pivotal to its successful development and well-deserved reputation. Through his determined rigor and focus on excellence, Pat contributed to every aspect of the program. He was personally involved with his students, helping them find jobs, and even offering free checkrides. Most importantly, Pat inspired students with his passion and enthusiasm for flying.

2012 INDUCTEE

COLONEL(R) RICHARD ANDREW SPERLING

WMU Alumnus, Military and Commercial Pilot, WMU Benefactor

Colonel(R) Richard Andrew Sperling was born in Elmhurst, Illinois on July 4th, 1942. After graduating from Western Michigan University as a Distinguished Military Graduate with a Bachelor of Business Administration degree in June 1965, he entered the US Army where he became a helicopter pilot. During his military career Col. Sperling earned numerous awards including the Legion of Merit, the Air Medal w/22 OLC and a Distinguished Service Cross for extraordinary heroism when rescuing a downed aircrew in Vietnam. His career in the Army and Army Reserves spanned 30 years, eventually retiring at the rank of Colonel. As a civilian, Col. Sperling was a commercial pilot with United Airlines, flying Boeing 737, 747, 757 and 767 aircraft until his retirement on August 1st, 2002. After retirement he continued to share his passion for aviation as a Boy Scout's Aviation Merit Badge Counselor and EAA Young Eagles Coordinator. The "Colonel Richard A. Sperling Distinguished Service Cross Endowed Scholarship" at WMU was established to provide students aviation opportunities. This scholarship assists Army ROTC cadets pursuing an Aviation Flight Science degree at the WMU College of Aviation.

2013 INDUCTEE

HERMAN W. LINDER

WMU Faculty Member, Aircraft Mechanic and Pilot

Herm Linder was born in Washington, Illinois and began a lifelong love for aviation by building radio controlled model airplanes. As he grew older and obtained the necessary education and certifications he began teaching aviation to others. He introduced aviation into his high school shop classes in Champaign, IL followed by teaching college level students at the U of I, Institute of Aviation. He joined the WMU aviation program in 1970 where he served until his retirement in 1985.

FAVORITE SAYINGS OF HIS: "ALWAYS LOOK WHERE THE LIGHT IS THE BRIGHTEST FIRST" AND "YOU HAVE TO OUT MECHANIC IT."

Favorite sayings of others: "He talked tough and had high standards but he was a softy at heart" and "He had so much fun teaching kids because he loved with a passion what he taught and he loved sharing it with his students." Upon his retirement, he founded the Herman W. Linder Endowed Scholarship for outstanding aviation maintenance students at Western Michigan University.

2014 INDUCTEE

CURTIS "DOC" SWANSON

WMU Alumnus, Associate Professor, Professional Engineer, Aircraft Pilot and Mechanic

Doc was born and raised in Illinois where he began looking to the skies and dreaming of flying an airplane. He started taking flying lessons at the age of 15 and received his PPL at 17. Doc graduated from the University of Illinois Institute of Aviation with an A&P Mechanics license, then entered WMU to complete his aviation education. At WMU Doc started his MS, and also began teaching as a graduate instructor. Before he knew it, 31½ years of teaching had passed and he retired as an Associate Professor in the College of Aviation in 1999. During his tenure at WMU Doc focused on curricula, course, and laboratory equipment development. Doc was instrumental in forming the Department of Aircraft and Automotive Engineering. He was a Faculty Senator, AAUP representative, and served on many university, college and departmental committees. Doc served outside the University on various boards and committees that included SAE International, Transportation Research Board, AIAA and AABI. He also served as a technical expert for Technical Advisory Service for Attorneys. For many years Doc served as a FAA Designated Mechanics Examiner. Doc considered one of his most satisfying and challenging educational tasks was the direction and development of the FSc and BSc degrees in Aviation Management at London Metropolitan University in England. Doc returned to the College of Aviation as interim chair of the college faculty. In 2007, Doc and his wife, Sylvia, retired to Florida, where Doc found his way to Piper Aircraft. At Piper he became a Lead Systems and Propulsion Engineer for the Altaire jet aircraft project. While there Doc continued to inspire young people to the wonders of aviation and his passion for aircraft design, and "fixing" and flying them.

2014 INDUCTEE

CLARENCE NEWTON (PAPPY) VANDEVENTER

WMU Faculty Member, Aircraft Mechanic and Pilot

Clarence Newton (Pappy) VanDeventer was born in Herrington, Kansas. He graduated from Winona Teachers College in 1946. From there he went on to teach at Hammond Technical Vocation High School in Hammond, Indiana, where he established the Aviation Department. He served as an associate professor of transportation technology at WMU from 1955 until his retirement in 1975. VanDeventer served as an instructor for the Army Air Force Cadet Training Program during World War II. During 1958, he earned his master's degree from Purdue University. In addition, he was a licensed FAA commercial pilot, flight instructor, airframe and powerplant mechanic and served as the Dormitory Director for Henry Hall from 1960 – 1966, and Eldridge-Fox Halls from 1966 – 1968. He also acted as the advisor to aviation students in the Transportation Technology Department from 1969 until he retired in 1975.

Throughout his tenure at Western Michigan University, VenDeventer helped establish programs and carry on traditions that live today. Not only did he serve as an advisor to WMU's Sky Broncos, VanDeventer was also instrumental in establishing the Western Michigan University Pilot Training Program in 1956. VanDeventer was a man who was immersed in aviation, his influence reaching far beyond the boundaries of Western Michigan University. In 1965, he authored the textbook used by the Armed Forces Institute, Introduction to General Aeronautics. The third revision was published in 1974. VanDeventer was cited by the FAA in 1965 for outstanding contributions made to the aviation industry.

EXCELLENCE IN DIVERSITY AWARD

Diversity is a critical component in any profession. Aviation is no different. The Multicultural Association of Aviation Professionals and Western Michigan University's College of Aviation annually recognize those who contribute significantly to the aviation community by promoting diversity and opportunity for all.

2012 AWARD

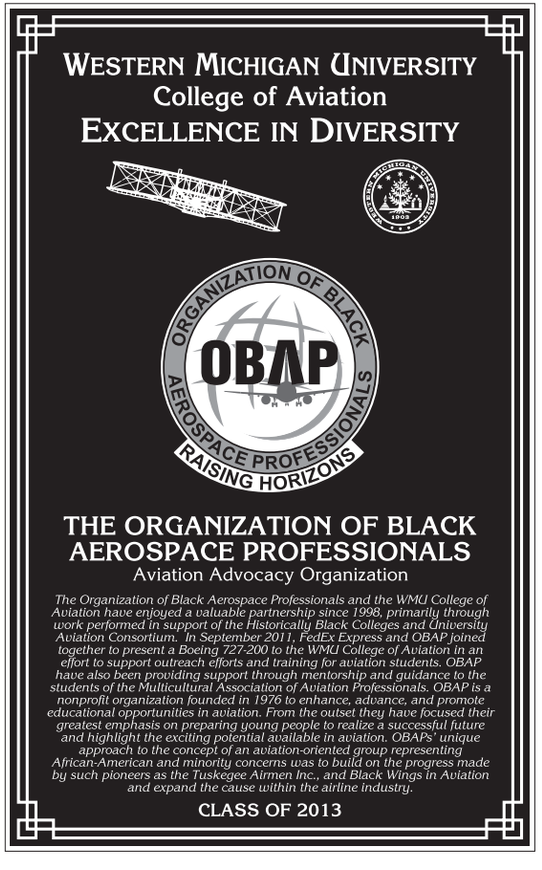
THE W.K. KELLOGG FOUNDATION – INAUGURAL AWARD

The W.K. Kellogg Foundation, for several years, has provided support and guidance to Western Michigan University's College of Aviation. The W.K. Kellogg Foundation was instrumental in relocating the College of Aviation to Battle Creek in 1997, then known as the School of Aviation Sciences. The Foundation has provided grant funds to establish a world-renowned aviation program in Battle Creek, including grants dedicated to the outreach, recruitment and retention, and scholarships for under-represented groups in aviation. Without the structure provided by the W.K. Kellogg Foundation, the College of Aviation's focus on diversity would not be as strong as it is today. The Foundation believes that all children should have equal access to opportunity. To make this vision a reality, it directs its grants and resources to support racial healing and to remove systemic barriers that hold some children back. The generosity of the W.K. Kellogg Foundation will have a positive life-long impact on all of our students, faculty, and staff.

2013 AWARD

THE ORGANIZATION OF BLACK AEROSPACE PROFESSIONALS AVIATION ADVOCACY ORGANIZATION

The Organization of Black Aerospace Professionals and the WMU College of Aviation have enjoyed a valuable partnership since 1998, primarily through work performed in support of the Historically Black Colleges and University Aviation Consortium. In September 2011, FedEx Express and OBAP joined to present a Boeing 727-200 to the WMU College of Aviation in an effort to support outreach efforts and training for aviation students. OBAP has also been providing support through mentorship and guidance to the students of the Multicultural Association of Aviation Professionals. OBAP is a nonprofit organization founded in 1976 to enhance, advance, and promote educational opportunities in aviation. From the outset it has focused its greatest emphasis on preparing young people to realize a successful future and highlight the exciting potential available in aviation. OBAP's unique approach to the concept of an aviation-oriented group representing African-American and minority concerns was to build on the progress made by such pioneers as the Tuskegee Airmen Inc., and Black Wings in Aviation and expand the cause within the airline industry.



2014 AWARD

CAPTAIN ALBERT GLENN

Captain Albert Glenn is currently a pilot with FedEx Express and has served as the Chair of the Board of Directors for the Organization of Black Aerospace Professionals (OBAP) and Managing Director of Global Flight Operations for FedEx Express Corporation. He holds a bachelor's degree in political science from the University of Memphis. Captain Glenn's tie to the WMU College of Aviation is his service as an active member of the WMU College of Aviation Advisory Board and our partnership with the Aviation Consortium. The Aviation Consortium is a partnership among OBAP, WMU and other Historically Black Colleges and Universities (HBCUs) who wish to promote efforts that increase the number of underrepresented minority individuals in aviation-related careers in the United States. Throughout his career, Captain Glenn has focused on addressing recruiting and retention issues for minority students currently seeking degrees in the field of aerospace. He also represents our college broadly in the industry and has mentored graduates of our program who have begun their aviation careers at FedEx. Through Captain Glenn's efforts and participation through his various roles, the college was able to secure the donation of a Boeing 727 from FedEx and OBAP. This donation will allow us to put a spotlight on diversity recruitment among youth in the region by utilizing the aircraft for special programs, which are currently in the development stage. Captain Glenn works tirelessly for the betterment of the aviation industry, OBAP, and WMU's College of Aviation.

Since I was a very young kid, I knew I wanted to be a commercial airline pilot. WMU was paramount in turning my dreams into the career I now enjoy every day. I learned skills at Western that I will use for the rest of my life – beyond just flying an airplane but in all facets of my life. I will forever cherish my experience at WMU and I'm proud to call myself a Bronco!

MARCUS WILLIAMS, '06
Aviation Flight Science
JetBlue Airways, First Officer

THANK YOU TO OUR PARTNERS IN EDUCATION

Thank you to our partners in education who provide scholarships for our students as well as internship and bridging opportunities. These types of partnerships open doors for our current students and our graduates and help them realize their dream of a career in aviation.

Our newest scholarship is the Daniel L. Van Dyke Memorial Scholarship, which was established during the summer of 2014 by the family of the late Daniel Lee Van Dyke. Mr. Van Dyke was a 1990 graduate of the flight science program in the College of Aviation. He worked as a professional pilot for All Phase Electric and AVSAT Incorporated before his untimely death in early 2011. Flying was Dan's dream and lifelong passion. This scholarship is to honor Daniel and his love for aviation, while allowing students to follow in his passion. Two $25,000 scholarships will be awarded to deserving flight science students each year.

Since 2000, more than $1.2 million in scholarships have been awarded to deserving College of Aviation students, thanks to our partners in education.

SCHOLARSHIPS

For Aviation Flight Science students:

Frank P. McCartney Foundation Aviation Scholarship

Warren Miller Distinguished Flying Cross Endowed Scholarship

Dale R. Pitsch Memorial Aviation Scholarship

Michigan Business Aircraft Association Scholarship

National Business Aircraft Association Scholarship

Colonel Richard A. Sperling Distinguished Service Cross Endowed Scholarship

The Major Henry Schmaltz, USAF, Endowed Scholarship for Aviation Sciences

Daniel L. Van Dyke Memorial Scholarship

West Michigan Business Aircraft Association Scholarship

Virgil and Maurine Williams Family Aviation Endowed Scholarship

For Aviation Maintenance Technology students:

Duke Harrah Scholarship

Duncan Aviation Inc., Aviation Maintenance Scholarship

William J. Kozel Scholarship

Herman W. Linder Scholarship

The Major Henry Schmaltz, USAF, Endowed Scholarship for Aviation Sciences

Virgil and Maurine Williams Family Aviation Endowed Scholarship

For any aviation program students:

Kern Family Endowed Scholarship

For incoming freshmen or transfer students in any aviation program:

W.K. Kellogg Diversity in Aviation Scholarship

INTERNSHIP PARTNERS

Duncan Aviation, Battle Creek

Kalamazoo/Battle Creek International Airport

W. K. Kellogg Airport

HISTORY OF AIRLINE BRIDGING AGREEMENTS

WITH WESTERN MICHIGAN UNIVERSITY'S COLLEGE OF AVIATION

Bridge programs between Western Michigan University's College of Aviation and various airlines provide a direct reflection of the cyclical nature of the aviation industry and have taken many forms over time. While it could be argued that the International Pilot Training Centre was, itself, a bridge program between Western and a number of major domestic and international carriers, bridge programs since then have settled into arrangements between Western and domestic regional airlines. Generally, all bridge programs have stipulated certain flight-time, certificate and academic-performance criteria along with successful completion of some number of in-person interviews.

One of the first of these latter-day bridge programs was between Western and American Eagle Airlines, then a wholly owned subsidiary of AMR, parent company to American Airlines.

The agreement, signed in December 2006, stemmed from an earlier visit by a three-person delegation from the College of Aviation to the leadership of American Eagle Airlines at its headquarters in Dallas, Texas, where the elements of a newly crafted JET, or Jet Equivalency Training, course were presented. The JET course is an intensive, nominally three-week long experience that includes computer-based independent course work on the systems of Bombardier's CRJ-200 aircraft, a week of classroom work and 10, four-hour periods in a CRJ-200 flight training device culminating in a check ride designed to replicate the check ride required of a new-hire pilot at a typical regional airline. American Eagle's leadership team immediately saw the strong similarities between our two training programs as well as its value in ensuring the success of a newly hired airline pilot and agreed to the bridging program.

The bridge with American Eagle was followed closely by another with Atlantic Southeast Airlines (ASA) in early 2007. ASA had been working closely with Western for some time providing samples of its own training profiles as well as the occasional visit to observe crew performance during the check ride.

Other bridge programs have been struck at various times with Atlas Air, Cape Air, Mesaba, Express Jet, Air Wisconsin and Air Net.

One of the most unusual bridge programs was formed in early 2011 with Pinnacle Airlines, called the Pinnacle Direct Hire Program. Based on the assumption that Western's graduation standards were as high, or higher, than Pinnacle's hiring standards, Pinnacle agreed to accept applicants without an interview and without additional flight time beyond those required to graduate. Although the program was terminated for unrelated reasons late in 2011, 60 Western graduates were accepted into the program, 20 of whom actually started new-hire pilot training. Of those who started training, and not even half of those were JET course graduates, all 20 successfully completed new hire training at Pinnacle.

Today bridging agreements exist between Western and Air Wisconsin, Express Jet, PSA, SkyWest and Envoy Air Inc. (the former American Eagle Airline). Once again, the Dallas-based airline leads the way in innovative bridging agreements with a program that enables the Western graduate, while accumulating flight time as a Western flight instructor, to become employed by Envoy Air, with all the employee benefits thereof, a guaranteed new-hire pilot slot if Envoy Air is hiring pilots and a $10,000 scholarship bonus check the first day of new-hire training. Several bridge agreements with other regional carriers are being developed but have not yet been signed, again reflecting the cyclical nature of the airline industry, as well as Western's growing reputation in the industry for producing quality graduates.

Today bridging agreements exist between Western and Air Wisconsin, Express Jet, PSA, SkyWest and Envoy Air Inc. (the former American Eagle Airline).

Professor Arthur Hoadley demonstrates the stall margin indicator. [1986]

COLLEGE OF AVIATION RESEARCH

Research is the tool by which leading university programs develop new knowledge, solve problems, and translate those results into the classroom. This provides students with an education that encompasses foundational training to state-of-the-art knowledge. Western Michigan University is designated as a Carnegie Research University, the gold standard for research institutions. The College of Aviation at Western has supported that designation by engaging in research for many years.

Before becoming a college, aviation operated as a part of the College of Engineering and Applied Sciences. During that period, an early aviation-research leader was Professor Arthur Hoadley. In 1979, Hoadley published "Conversion of Wing Surface Pressures into Normalized Lift Coefficient," where a normalized lift coefficient indicator was developed for a single-engine aircraft that incorporated a low-cost, capacitance-type pressure transducer and electronic circuit to calculate the wing pressure coefficient. The system eliminated the need for probes protruding from the aircraft's wing by using two flush pressure tapes on the wing surface and the aircraft's static pressures. In 1984, Hoadley published "Development of a University Engineering Flight Test Aircraft FAA Licensed Under Normal Category," studying the value of providing engineering students with a laboratory experience as vital to their education and development as engineers. Flight-test facilities using aircraft that remain under a normal airworthiness certificate provide a rich learning environment at a fraction of the cost of what most flight-test facilities cost. Hoadley continued his work studying the concept of the stall-margin indicator, an instantaneous cockpit situation and control data display that provides real time stall margin data to the pilot during routine operations as well as greatly enhances the education and training of pilots in 1986.

Other early aviation researchers include Dr. Maureen Pettitt and Joseph Dunlap. They were instrumental in researching, developing and implementing the International Pilot Training Centre at Western Michigan University. Their research began years before implementing the training centre in 1999. This effort built upon earlier work studying international pilot training cooperation, professional pilot development, psychological factors that predict pilot performance, and early work on the Advanced Qualification Program (AQP), now widely used in the airline industry.

When aviation transitioned from a school to a college in 1999, we saw the need to participate in the greater university research community. Applied aviation research in the college is focused around High Risk Industry Operational Performance. Our work falls into three subcategories: 1) Safety Management Systems; 2) Education and Training; and 3) Human Performance.

Since establishment as a college in 1999, we have continued to build our research program. External and internal partnerships and projects have investigated a wide variety of aviation topics. The following is a sampling of research projects and publications by College of Aviation faculty and staff.

- A Feedback Intervention To Increase Digital And Paper Checklist Performance In Technically Advanced Aircraft Simulation.
- A Model Of "Applied Ethics" In Aviation Safety: The Aviation Safety Reporting System.
- An Approach To Aircraft Crew Reliability Based On Modern Control Theory.
- Analysis Of Flight Crew Performance Factors, And Development Of Charter Air Transportation Flight Crew Scheduling Method.
- Assessment System Development.
- Aircraft Reciprocating Engine Condition Monitoring Thru Operating Parameter Trend Analysis.
- Aircraft Maintenance Education And Industry Alliances: The Answer To Modernizing Aircraft Maintenance Programs.
- Assessment Of Piloting To Understand Where Our Students Fail, How Best To Mediate Them, How To Teach Our Flight Instructors On How To Assess Students And Development Of A Matrix For Students Not Making Progress.
- Both Sides Of The Cockpit Door: A Global Study Of Pilot/Flight Attendant Coordination And Communication.
- Calibrating Flight Instructor Evaluation Of Student Performance.
- Collegiate Aviation Safety Reporting Systems.
- Collegiate Flight Training: Making Progress in the Face of Adverse Conditions.
- Comparing The Accuracy Of Performing Digital And Paper Checklists Using A Feedback Package.
- Complementing CRM Training And Error Management With Applied Behavior Analysis.
- Countermeasures To Mitigate Effects Of Fatigue Among Flight Attendants.

Low fidelity simulator used in research. [2013]

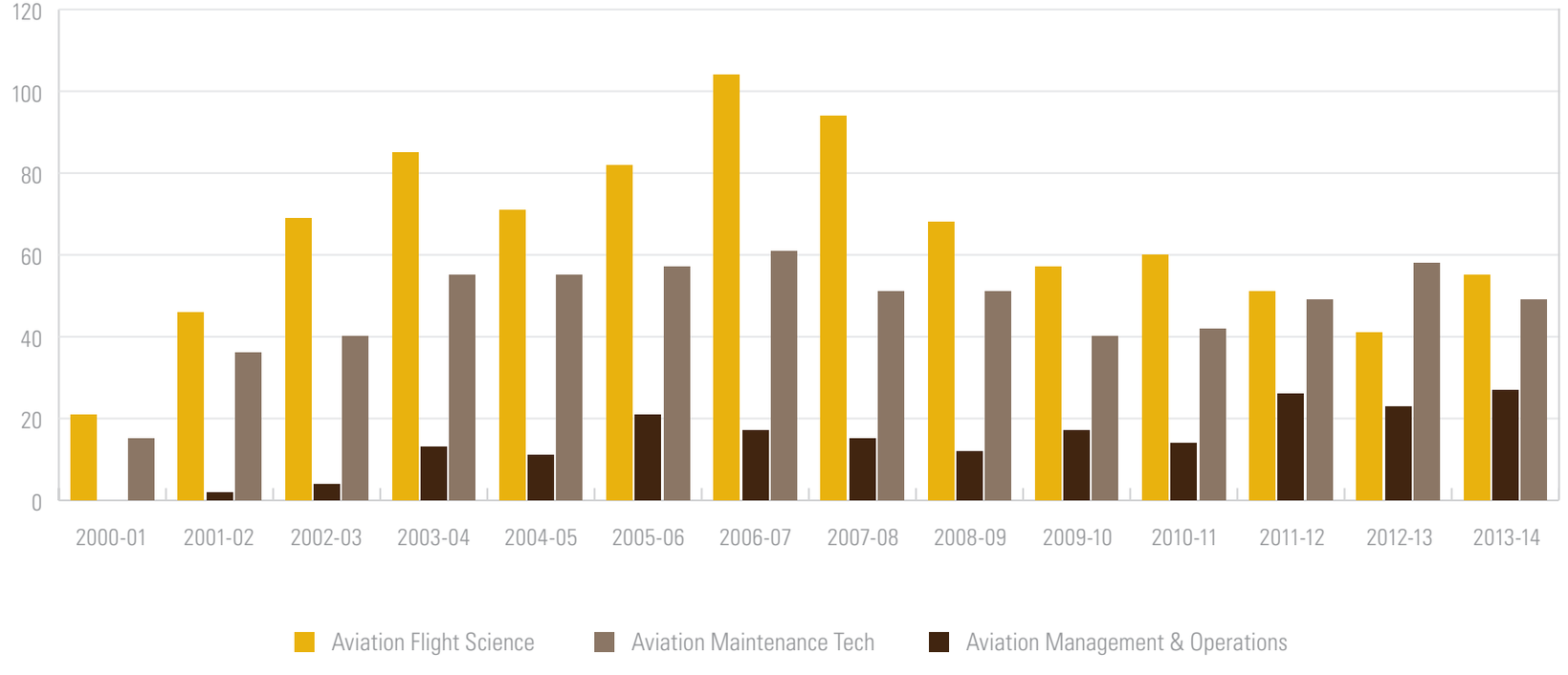
- Creating Continuous Improvement In Aviation Safety: Fitting A Behaviour-Based Safety Process To Flight School Operations.
- Crew Orientated Flight Training For Pilots And Flight Attendants.
- Dealing With The Nightshift: An AMTS' Way Of Life.
- Design Of Multimedia Situational Awareness Training For Pilots.
- Developing A Mobile Aviation Sciences Lab To Outreach To Vulnerable Children Populations In The Kalamazoo And Battle Creek Schools.
- Developing A Safety Culture in Aviation Maintenance Students.
- Effects Of Light Exposure On Crew Member Fatigue: To Improve Transportation Safety And Productivity.
- Effects Of Pc-Based Pre-Training On Pilots' Performance In An Approved Flight-Training Device.
- Engine Condition Monitoring: An Important Component Of On-Condition Maintenance.
- Establishing A Total Safety Culture Within A Flight Department.
- Ethics In Aviation Education.
- Evaluation Of Wireless Communication Devices: To Improve In-Flight.
- Simulation Research Using Simulated Healthcare Events To Identify Team Skills And Behaviors That Can Help The Healthcare Industry Provide Better Patient Safety, A Better Culture And A Better Work Environment.
- FAA Certification Issues For New Manufacturing Techniques.
- Female Pilots – A Study Of The Issues.
- Gender Differences In An Aviation Flight Science Degree Program, A Study Of Performance And Population.
- Globalization Of Maintenance Engineering Education.
- Hands-On Approach To Teaching Aviation Fuels And Lubricants.
- High Aerodrome Elevation And High Ambient Air Temperature Takeoff Analysis And Recommendations.
- How To Manage Stress In The Aviation Maintenance Environment.
- Incorporating Air Transport Association Code Into The Maintenance Curriculum.
- In-Flight Security Onboard Commercial Aircraft: Critical Improvements Needed.
- In-situ Simulation: Evidence for Effective, Team-based Education.

- Introduction Of Web-Based Research And Training In An Aviation Program.
- Navigating Cultural Waters: Pilot/Flight Attendant Communications Across China.
- Preparing Flight Instructors To Meet European Standards For Ab-Initio Airline Pilot Training.
- Private pilot progress: Where do we fall down?
- Reliability, Maintainability, And Supportability: Valuable Concepts For The Aircraft Maintainer.
- Safety Culture And The AMT Work Environment.
- Security On Board Commercial Aircraft.
- Service Difficulty Reporting Program.
- Simulation Exercises with the American College of Cardiology.
- Stress Coping Strategies For Commercial Flight Crew Members.
- Team Simulation Experience Of Patient With Acute STEMI: Role Playing As Innovative And Interactive Case Management Training, Using Design Processes From Air Carrier Simulation Training.
- Testing Alternate Fuels For General Aviation Aircraft.
- The Effect Of Feedback On The Accuracy Of Checklist Completion During Instrument Flight Training.
- The FAA Type Certification Process For Light Aircraft Using Non-Conventional Structures.
- The Importance Of Alternatives To Glycol-Based Aircraft Deicing And Anti-Icing Fluids.
- The On-Call Nightmare: Setting Standards For Overtime Expectations Of Aviation Maintenance Personnel.
- Training Facilitated Debriefers to Conduct In-Situ Simulations for Diagnostic Evaluation Within A Healthcare Organization.
- Transitioning From Digital To Analog Instrumentation.
- Turbine Engine Borescope Training Aid: Teaching Objective Damage Assessment.
- Use Of Engine Condition Monitoring As A Troubleshooting Tool.
- Using Graphic Feedback To Eliminate Checklist Segment Timing Errors.

All of this hard work has created a foundation of research-knowledgeable faculty and staff that led to the College of Aviation being included as an affiliate school in the Federal Aviation Administration's newest General Aviation Center of Excellence for general aviation research, also known as the Partnership to Enhance General Aviation Safety, Accessibility, and Sustainability, or PEGASAS. Funded for 10 years, the College of Aviation is currently highly involved in the Weather Technology in the Cockpit project. More than 10 college faculty and staff are participating with colleagues from Purdue University, Texas A&M University, The Ohio State University, Kent State University and Southern Illinois University.

From small individual projects, we have progressed to becoming a significant participant in aviation research at the national level. Just as aviation education has grown and evolved over the past 75 years at Western Michigan University, look for aviation research in the College of Aviation to continue that proud tradition.

COLLEGE OF AVIATION: DEGREES AWARDED



Source: Cognos: Academic Outcome:REG:Awarded Degree Summary by College

ENROLLMENT & DEMOGRAPHIC TRENDS

Thirty students at Western State Teachers College began their flight training in the fall of 1939. Of those 30 students, four were women, who braved the most rigid of physical exams which were demanded by the Civil Aeronautics Flight School. By the summer of 1939, the number of students in the flight program had doubled to 60. Already enrollment caps were put in place—50 for the primary flight course, that led to a private pilot's license, and ten for the secondary flight course, though student demand necessitated the addition of another secondary course, also capped at ten students. In the fall of 1940, a course in aviation mechanics, the first to be offered by any school of collegiate rank in Michigan and one of the few of its kind in the United States, opened with 12 enrollees. By the fall of 1942, enrollment in aviation mechanics had increased to 46. In 1947, the air transportation curriculum, a four-year course leading to a bachelor of science degree was offered.

When the College of Aviation formed in 1999, there were 150 cadets from British Airways, Air Lingus and United Arab Emirates Airlines enrolled in cadet courses within the International Pilot Training Centre. These students were enrolled within the College of Aviation and thus accounted for a proportion of the total college enrollment. Over the next year, a determined recruitment drive was carried out to market our new college with huge success, leading to a large increase in enrollment for 2001 and 2002. However, the events of Sept. 11, 2001, saw the beginning of the demise of IPTC since the international carriers providing the contracts immediately suspended their cadets' training programs and the aviation industry itself took a very steep downturn which effectively reversed the enrollment trend for the collegiate programs. It would be impossible to determine whether this growth would have continued if 9/11 had not occurred.

Thus began a downward trend in enrollment for our Aviation Flight Science major. The corresponding upswing in enrollment in the other two majors can be explained by a change in career aspirations of our students. Many still had a desire for a career in aviation, but living through the downturn in the industry convinced many to seek a career path other than being a pilot to give themselves more options when such market deviations occurred. The economic recession of recent years further damaged confidence in the industry and kept enrollment low, but increasing positive signals about both the economy and the aviation industry have seen the downward trend bottom out and an increasing trend begin once again. In fact many students who two or three years ago would have enrolled in the aviation science and administration program are now returning to the flight science program; hence as the flight program increases the administration program shows a slight decrease. However, this decrease is not as marked as many more students are now pursuing double majors to allow themselves to pursue

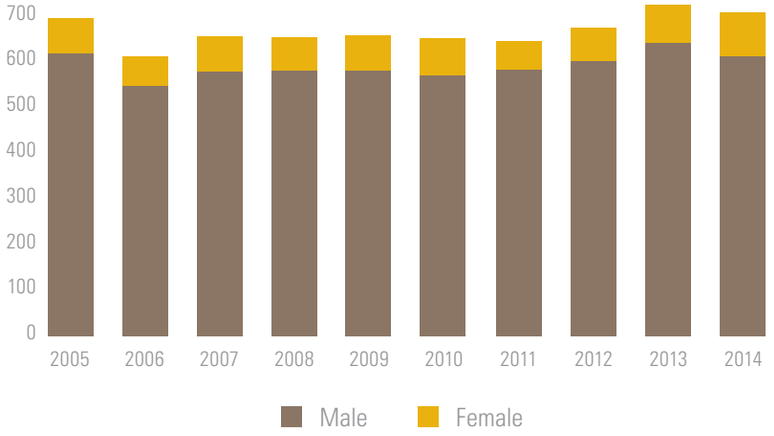
UNDERGRADUATE MAJORS BY PROGRAM

BOTH PRIMARY & SECONDARY MAJOR COUNTED

	FALL 2000	FALL 2001	FALL 2002	FALL 2003	FALL 2004	FALL 2005	FALL 2006	FALL 2007	FALL 2008	FALL 2009	FALL 2010	FALL 2011	FALL 2012	FALL 2013
AFAJ: Aviation Flight Science	605	497	461	400	506	511	454	433	382	370	390	375	388	438
AVAJ: Aviation Science & Administration + Avia Mgmt & Ops	45	54	85	86	95	152	143	196	221	190	200	200	238	248
MTCJ: Aviation Maintenance Technology + MTE: Aviation Maintenance	30	48	63	76	84	91	69	71	64	80	111	123	129	127
PRFL: Pre-Aviation Flight Science	—	236	318	335	108	9	11	13	8	20	—	—	—	—
TOTAL	701	849	939	903	796	764	677	714	675	660	701	698	755	813

Source: IR and Cognos |Student Enrollment:REG: Registered student information by major

REGISTERED STUDENTS: MALE VS. FEMALE



	MALE	FEMALE	TOTAL	% MALE OF TOTAL	% FEMALE OF TOTAL
2005	627	78	705	89%	11%
2006	555	65	620	90%	10%
2007	587	78	665	88%	12%
2008	588	76	664	89%	11%
2009	589	77	666	88%	12%
2010	577	84	661	87%	13%
2011	591	64	655	90%	10%
2012	609	75	684	89%	11%
2013	650	86	736	88%	12%
2014	620	98	718	86%	14%

Source: Cognos:ENR:20.00.20 Registered Student Detail

a career first as a pilot but then being prepared to move across into the business or maintenance side of the industry later if economic, industry or personal circumstances dictate. Thus we see enrollment trends of today as a reflection on the increasing tendency of students to plan for the far future as well as the near future – a positive change.

The number of degrees awarded each year follows the trends in enrollment for the most part, with a drop in flight science degrees awarded corresponding to an increase in aviation science and administration degrees in recent years. The aviation maintenance technology degree saw a sharp increase in awards in 2011-2012 and has now levelled off. We feel this may be due to the current aggressive marketing of 18-month to two-year vocational schools that offer a fast route to A&P certification and that first job. The college is aiming to develop a marketing strategy to communicate to high school students that although their first job is a coveted achievement, it is also important to plan for the future since throughout the professional aviation industry there is a continuing requirement for four-year degrees in aviation maintenance.

Flight program graduates visit the College of Aviation. [2013]

Aviation science and administration graduate. [2013]

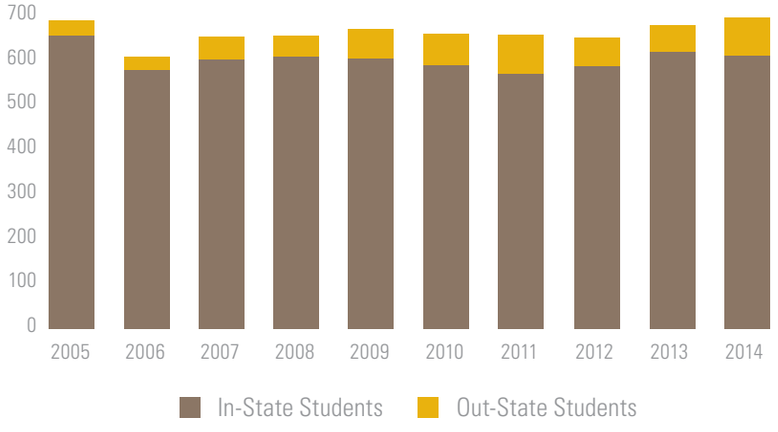
The college has also been working on improving diversity among our students. This is a challenge since diversity in a college such as ours closely aligns with diversity within the aviation industry itself. However, the percentage of female students has grown from 11.45 percent in fall 2008 to 13.65 percent in fall 2014. In addition, we have seen an increase in our international student population from 2.26 percent in fall 2008 to 3.34 percent in fall 2014, somewhat of a decrease from fall 2011, when we saw our highest percentage of international students at 5.8 percent. Another area of growth is in our out-state student population. This has increased overall from 7.62 percent in fall 2008 to 14.03 percent in fall 2014. This growth has been particularly strong in the flight science program, increasing from 7.33 percent in fall 2008 to 16.49 percent in fall 2014. This enrollment reflects an increase in recruitment efforts out-state and creates both a point of pride and a challenge. Historically, the larger our percentage of out-state student admissions, the lower our actual yield rate come the fall due to the high out-state tuition rates students have to pay for their first year.

Overall, the College of Aviation has seen increases in many areas over the past two or three years largely due to recruiting efforts in the face of an uncertain economy and the global challenges that we face today.

REGISTERED STUDENTS: IN-STATE VS. OUT-STATE

Source: Cognos:ENR:20.00.20 Registered Student Detail

	IN-STATE	OUT-STATE	AS % OF IN-STATE
2005	650	35	5.38%
2006	574	31	5.40%
2007	598	51	8.53%
2008	604	46	7.62%
2009	600	65	10.83%
2010	584	71	12.16%
2011	566	87	15.37%
2012	583	64	10.98%
2013	615	59	9.59%
2014	606	85	14.03%

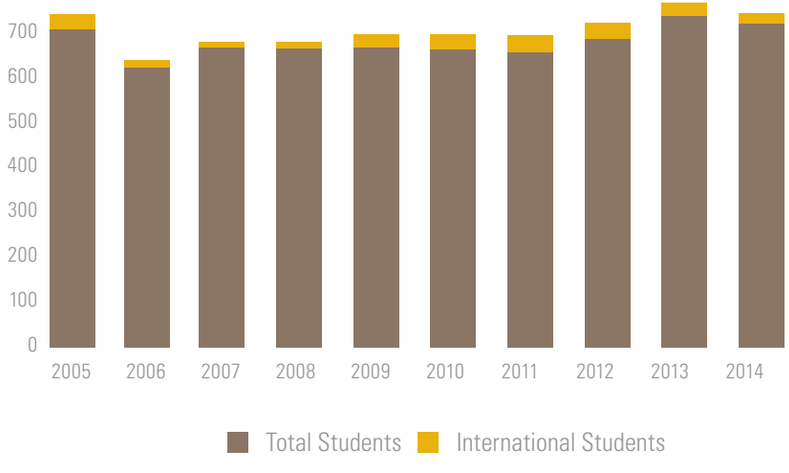


Source: Cognos:ENR:20.00.20 Registered Student Detail

REGISTERED STUDENTS: INTERNATIONAL VS. TOTAL

Source: Cognos:ENR:Registered student information by population:147

	TOTAL	INT'L	% OF TOTAL
2005	705	34	4.82%
2006	620	17	2.74%
2007	665	13	1.95%
2008	664	15	2.26%
2009	666	30	4.50%
2010	661	36	5.45%
2011	655	38	5.80%
2012	684	38	5.56%
2013	736	30	4.08%
2014	718	24	3.34%



Source: Cognos:ENR:Registered student information by population:147

Summer Camp [2014]

DOES THE FUTURE LOOK BRIGHT? BETTER PUT ON YOUR SHADES!

Back in the 1980s, there was a popular song that contained the lyrics, "The future's so bright, I've got to wear shades!" Looking forward, the College of Aviation is focused and prepared to continue its 75 year legacy and continue its growth and impact in the industry. Part of the process of prognosticating the future is to look back. Past performance is typically indicative of future results. When analyzing the recruitment and outreach efforts over the past several years, the College of Aviation is poised to continue its upward growth and trends with regards to enrollment, outreach, and industry connection.

As part of its recruitment and outreach plans, the College of Aviation has embarked on an aggressive strategy of cultivating the next generation of aviation professionals. Outreach efforts over the previous several years have included elementary and middle school field trips to the airport, school visitations with the College of Aviation Kitfox, and numerous career fairs designed to expose and introduce the field of aviation to a wider field of children. While many of these events are focused on using aviation as a catalyst to support STEM (Science-Technology-Engineering-Math) education, they are also being used to demonstrate the uniqueness and interesting world of aviation.

As the College of Aviation looks to the future, these activities and events are planned to get bigger and better. Launching in 2014, will be the Mobile Aviation Lab. This distinctive lab will allow the College of Aviation to springboard from its initial outreach efforts and improve upon them dramatically. In addition to using aviation concepts to help reinforce STEM, the primary goal of the Mobile Aviation Lab will be to bring the "airport" to the students. One of the challenging aspects of these outreach activities is distance and the lack of transportation to the college. The Mobile Aviation Lab takes this barrier out of the equation, allowing for greater access and exposure to a wider audience of young students.

Another avenue, which demonstrates a bright future for the College of Aviation, is the growth and demand in the aviation summer camps offered. Aviation summer camps have been offered at the College of Aviation since the late 1990s. One of the first participants of an aviation camp, Randall Rochon, attended and graduated from Western Michigan University. In the 10 years since his graduation, Rochon has prospered in aviation, moving from company to company, and positioning himself for his current role: First Officer for United Airlines. If Rochon is indicative of the future, the College of Aviation will need many sunglasses!

Top: Randall Rochon, United Airlines B-737 F/O. [2014]

Bottom: Aerospace Day at WMU. [2012]

This Kitfox, donated to COA by Dan Hammil, visits many schools and other events throughout the year. [2014]

The aviation summer camps offered at Western Michigan University have evolved and grown to significant numbers. After a few years in hiatus, the aviation summer camp rose like a Phoenix out of the ashes in 2013. After an initial offering of an introductory aviation camp only, the camp grew to three sessions in 2014: two introductory aviation camps and an advanced flight camp. Not only were these camps fun, all three were full as well.

Not to rest on its laurels, the College of Aviation is working to grow and advance the camp options offered. In addition to the two introductory camps and advanced flight camp, in 2015, the College of Aviation will be unveiling its advanced maintenance camp. This will be followed in 2016, with the launching of the advanced management camp. All of these camps will be designed to offer a behind-the-scenes look into the aviation career fields, while also demonstrating the fun and excitement that each can offer.

Over the past five years, the College of Aviation has taken a proactive approach with regards to recruitment and expanding the Western Michigan University brand. In an effort to reach a broader audience, the College of Aviation has aggressively begun a recruiting strategy outside the state of Michigan. While the college only visited three national college fairs in 2009, this number has ballooned to almost 15 in 2014. Coupled with the college's involvement and participation at other national events and conventions such as Women in Aviation, AirVenture, the Organization of Black Aerospace Professionals, Sun 'n Fun, the Regional Airline Association, and the Future Farmers of America, it is easy to understand how the College of Aviation's reputation and influence continues to grow.

In addition to its presence at national college fairs, the College of Aviation has also adopted a strategy of interacting and interfacing with aviation-specific high schools and programs. The college has worked closely with the West Michigan Aviation Academy, Davis Aerospace Technical High School, the Kalamazoo RESA Education for Employment program, and the Calhoun Area Career Center. Using the successful relationships established with these programs as a guide, the College of Aviation will be expanding its involvement with high school aviation programs across the Midwest and eventually the United States. The goal is to expand the WMU brand and capture a larger market of interested aviation students.

The success of Western Michigan University's College of Aviation rests in a variety of hands. First is the vision and mission established by the college's leadership. Second is the continued growth of an active faculty and staff, dedicated to the growth and maturity of the college and its programs. Third is the expansion of the recruitment and outreach department, expanding the brand and continuing to demonstrate that Western Michigan University is an aviation force to be reckoned with. Lastly, and most importantly, is an active and engaged alumni and friends network, a group of individuals who are proud to carry the WMU flag and continue to assist in the growth and impact of our programs.

The College of Aviation is much like an eight-cylinder engine. Each of the hands above is the equivalent of two cylinders. When one cylinder fails, the engine does not run as effectively. However, when all eight are firing at the same time, the engine is unstoppable! After 75 years of aviation education, the College of Aviation is firing on all eight cylinders. The engine is purring and running well. Looking toward the future, all that should be required is some annual tune-ups and basic maintenance.

Does the future look bright? Better put on your shades!

I witnessed WMU grow from having nine airplanes to having 60 aircraft. It was exciting to watch the school evolve into a world-class college of aviation. From the excellent instructors to the lifelong friendships, many of my best memories come from my time at WMU.

ROBERT EDDY, '98
Flight Science
First Officer, United Airlines

ALUMNI AND FRIENDS

"My time as a Bronco aviator prepared me for my ongoing career in the Air Force. The day to day discipline of studying and preparing for flights laid a firm foundation for future growth. When I went through the program, you completed your private and instrument ratings in the Cessna 172; your commercial single engine in the Piper Arrow, Commercial multi-engine in the Piper Seneca, and I had the phenomenal opportunity to fly the Extra 300 for spin training(still the most fun I have had in the air). Learning different airplanes allowed me to develop an Air-sense and critical thinking mindset above most of my peers throughout Air Force Pilot training. Three years after I graduated from WMU, I was flying international missions in the KC-10 Extender, moving fighters and cargo all over the world. I have been to 13 different countries and all over the states. Today, I am flying in my fifth Air Force aircraft in one of two communities which handpick their crew force. I am truly blessed and I believe the foundational skills learned at WMU have been critical in allowing me to pursue my aviation dreams. Happy 75 years COA--Good luck and God Speed Broncos!"

JOE VANDUSEN, '05
Aviation Flight Science

"Being from Tacoma, WA and having never visited Michigan before attending Western Michigan University, I really did not know what to expect. From the moment I stepped foot on campus until graduation in December 2002, I must say that it was truly some of the best times of my life. WMU and the College of Aviation is the reason why I am a pilot for United Airlines today. WMU gave me the skills, foundation and character I needed to go out into the real world and become successful. Today I am still very close with many of my college mates including some of the WMU staff. I am proud to be a Bronco and to support WMU every chance I get. In my professional industry Western Michigan University is regarded as a very prominent university and when I say I am an alumni, my co-workers say "Great" because they understand the education I have. WMU is where it's at!

RANDALL ROCHON, '02
United Airlines
B-737 F/O

"I came to WMU in the fall of 1975 to earn an airframe and powerplant (A&P) license. I had already earned a BS degree and had considerable flying experience as a pilot in the USAF but I wanted to gain additional education and experience in aviation maintenance. I really enjoyed the programs and people at WMU and after a brief career as a corporate pilot/mechanic, I returned in 1979 to begin my career in aviation education. It has been a most enjoyable and rewarding adventure for which I am very grateful. And, although I retired from full time teaching in 2008, it is not over yet! As of the fall of 2014 I am still teaching part time and looking forward to meeting new energetic and eager students this fall. I love Western!"

BOB AARDEMA, '85
M.S. Manufacturing Administration, Retired Faculty

"The thing I am most grateful for as a WMU aviation school graduate is the fellowship. I graduated almost 30 years ago and I still have contact with many classmates and instructors. The aviation community is a close knit group and WMU is a large part of it."

MARK MCSOLEY, '85
United Airlines Pilot

"Western Michigan University was instrumental in helping me achieve my goals in the aviation profession. Their ability to attract highly qualified professors from both military and civilian aviation disciplines clearly aided the university in maintaining an industry leading and nationally recognized program. My experiences at WMU are positive from a learning perspective, networking, and maintaining lifelong friendships. Following graduation, I initially pursued a military flying career only later joining the ranks of civilian airline pilot. I now have approximately 20 years at United Airlines and may soon retire from a great career with the United States Air Force and Michigan Air National Guard."

Lt. Col. KENNETH MORRIS, '85
United Airlines 747-400 First Officer

"I have only the fondest of memories when I reflect upon my time at WMU and the College of Aviation. I offer my sincere congratulations on 75 impressive years, and wish all the best to the College, faculty, and students in the next 75 to come!"

DAN HOMOLEK, '08
Flight Science

"Congratulations, College of Aviation! Seventy five years? How time flies when you are doing such important, good work. Like a great flying machine, you've aged well. You have many updated gadgets, but your airframe is the same solid core of strength, professionalism, and excellence. You have been a model of consistency. For decades, you have produced aviation professionals ready for the important, exciting work in the aviation world. I recall my first days in an airline cockpit, knowing that I was ready for the task, after honing my skills at Western Michigan University. You have also long been an academic gem in Michigan and the Midwest, about which I know my colleagues on the Michigan Aeronautics Commission take much pride. So, again, congratulations! Keep up the good work!"

RUSS KAVALHUNA, '01
Aviation Flight Science
ATP; Ret. CFI, WMU; Ret. Captain, US Airways Express; Commissioner, Michigan Aeronautics Commission; JD;
Federal Prosecutor, Western District of Michigan

"Congratulations, College of Aviation! It is my pleasure and honor to congratulate the WMU College of Aviation on its 75th anniversary. As a proud Board member and WMU Alumni, I've become genuinely captivated by the manner in which education and training is conducted; in addition, the faculty and staff at WMU Aviation are world class. With more than 700 undergraduates annually, the College is making a significant contribution to our U.S. aviation workforce. Equipped with a full university experie4nce, aviation students are uniquely qualified to leverage their education and build a solid career and future. You can be most proud of the rich history of this academic institution and pleased with the current and future (flight) plans of this fine learning organization. May your next 75 years be blessed with higher altitudes of learning as you develop young men and women into fine aviators supported by an incredible curriculum, and (jet) fueled by an unparalleled passion that is only WMU Aviation!"

ADRIENNE L. STEVENS, '89
Engineering Technology
Private Pilot

In my aviation career, I owe my success to our College of Aviation. The courses, faculty, instructors, and facilities all help drive a student toward lasting success. Congratulations on 75 awesome years! Cheers to 75 more!

MARTY COAKER, '04
Republic Airlines, Captain

"In 1957 the University just became designated a University – prior to that it was Western College. I graduated from the aviation program with maintenance and flight (PPL) and there were about 20 students in the program. All the flying and maintenance was done out of Plainwell; there were three J5 airplanes owned by the University and flown out Plainwell. Clarence VanDeventer was my flight instructor, and Robert Wichers was one of my maintenance instructors. Learning to fly is my most memorable moment here. I left aviation shortly after graduation, and became a technical writer for most of my career, but I attribute flying and my maintenance training to my success in that field. I am from upper Michigan and came to WMU specifically for aviation. At the time I only remember WMU and Parks in St. Louis as advertising aviation programs, and I thought I might as well stay in Michigan.

This was my first time back to WMU since graduating in 1957! When I arrived here – I was a kid from upper Michigan, I did all of my correspondence with WMU through U.S. postal.

I got on a Greyhound bus and got off in downtown Kalamazoo. I looked around and thought 'well, what now?' I walked across the street to the YMCA, and they said yes, they had a room. I then found my way to campus and by luck someone had put a sign in the snow saying 'Registration this way.' I stood in line for a half hour to register, got to the front of the line and they could not find my paperwork. They asked 'are you sure you sent it in,' and I said 'yes, absolutely.' Finally someone asked which college are I going to, and I said Western…they said 'this is Kalamazoo College'."

Highlights of interview with Beth Beaudin-Seiler*:*

DAVID GROMALAK, '57
Air Transportation

"Jane and I thank you and Liz for a dazzling tour of the aviation campus and facilities. How much has changed over the course of 50+ years.

From 2 Piper Cubs on a grassy field and a sheet metal hanger with a dirt floor. Just think, when I took instructions, things were a little different. The plane had no electric starter. Somebody had to pull the prop to start the engine. The gas tank sat on the pilot's lap. The fuel level indicator was a cork float in the gas tank attached to a wire rod extending through the fuel cap. I had 2 mag switches, a compass, a tach, an altimeter, a turn and bank indicator. There was no battery, running lights, cabin lights, instrument lights or radio equipment of any kind. All flights were VFR. All of my mechanic courses relied upon school shop tools. The only tool that I ever supplied was my pen. My flight training was a summer school course. $240 for 40 hours of instruction. Of course the salary of my first job upon graduation was $100 per week.

Now look at the equipment, the technology, the facilities, the more in-depth training, Things sure have changed. Thank you for your hospitality."

Thank you note after visit received by Dave Powell:

DAVE AND JANE GROMALAK

"When you look back over the years most people go back to their high school years. Mine is college days. I went to WMU from 1982-86. Had the great pleasure to have teachers like Deckard, Aardema, Wiley, Hoadley and Swanson to name a few. Even though I was in the management side of things, I had several occasions to deal with the maintenance side of life with Larry Hoikka. All of these gentlemen had and still do have a huge impact on my life. I am fortunate to still see some of them on a yearly basis and get to reminisce about the old days. We are all older, smarter and sometimes more grumpy, but very much enjoy thinking about the old times at WMU. The classes we had together. The times we broke the airplanes and Larry would chew us out (in his own way, of course). The program was much smaller and personal back then at Kalamazoo Airport. I remember the flight line starting with Leisa Perry and ending with Pat Shiffer, with Ron Sackett and all the other instructors in the middle. Leisa would dispatch us and Pat would scare us with a check ride. They were all great instructors and people that I now call friends. There are way too many memories to list here. They are more fun told at gatherings, like annual poker parties.

After WMU, I went on to flight instruct in Ohio for 18 months. Then moved to the airlines with Simmon's from 1988-96. I left my commuter career and went to United Airlines in 1996 where I currently reside as an Airbus 320 first officer. I wouldn't change my aviation beginnings for anything in the world. I remember on a daily basis all the good times I had as a Sky Bronco at WMU."

TOM INGERSOLL, '86

"As a result of my education at Western Michigan University's College of Aviation, I was well poised for a successful career in aviation. Not only did the technical and mechanical instruction prepare me for the obvious responsibilities of an Aircraft Maintenance Technician, but the non-technical and non-mechanical instruction provided the foundation I needed to be a well-rounded individual, affording me the ability to advance in my career."

JUSTIN MERKLING, '98
Aviation Maintenance Technology
Duncan Aviation-BTL
Engine Services Manager

"It has been my pleasure to watch the College of Aviation grow into the first rate program it is today and to have played a small role in helping spur this growth. The move of the campus to Battle Creek was a proud day for me and the others who worked so hard to make it happen. The aviation community is well served by the strong programs that have been developed and by the outstanding graduates who have entered the aviation workplace. I am honored to be a small part of WMU's College of Aviation and look forward to watching the college continue to grow and be a leader in Aviation education."

SIDNEY ADAMS, JR
Battle Creek Community and Aviation Advocate

"My first class at Western was an airframe class that was taught by Clarence VanDeventer who is being inducted into the College of Aviation Hall of Honor this year. There were about 18 in that class and most of us took the same classes for a while. From that group only two of us completed all the courses necessary to qualify for the airframe and powerplant license, and I was one of them. I think that this was gratifying to Mr. VanDeventer since we were the first two to get the A&P license since he started teaching at the University. During my second year at Western, while still taking courses toward my A&P license, I started my flight training. Since they didn't have a slot for me during the summer I flew the Link trainer (now on display at the Air Zoo) and logged five hours of instrument time. The first entry in my log book was that five hours signed off by Mr. VanDeventer. That fall I started flight training in Piper J-5s and Pat Schiffer was my flight instructor. This flight course was 40 hours of flight time and cost $180.00. In 1962, I left the University and worked as a mechanic at two different places and returned to WMU in 1965 to a new position as an aircraft mechanic and many other things. It was Mr. VanDeventer who hunted me down to inform me about this new position."

LARRY HOIKKA, '61
WMU Aircraft Mechanic and Maintenance Supervisor

Congratulations to WMU Aviation for its 75 year anniversary. Although the technology, equipment, and facilities have certainly changed through the years, WMU Aviation's commitment to educational excellence and comprehensive career preparation for its students has never changed. Glad I had the opportunity to be part of the aviation history at WMU. Hope I'm around for the 100th…

THOMAS L. DECKARD
Retired WMU Aviation Faculty

"Western Michigan University has given me everything. At Western, I launched my career, made friends (that are more like family), got a life altering education, and, oh yeah…met my beautiful wife. It's a real emotional thing, recounting our experience at Western. If I could trade places with any freshman entering today, I would, in a heartbeat. My short career has taken me all over this great country and beyond, but the fondest memories I have in this life are from Kalamazoo, Michigan. They must put something in the snow, or maybe the Bell's beer. You will not understand how much Bronco Hockey and Football mean to you until you're gone.

The College of Aviation is like Cheers. Everyone knows your name, even the Dean. Some of the most transferable skills I learned, though, were learned outside the classroom, with organizations like the Sky Broncos, Calhoun County Red Cross, and volunteer efforts with every other RSO on campus. The work ethic and the PRECISION flight training I did with that team have directly contributed to my success in the Coast Guard. No one knows fatigue like junior officers deployed on a Coast Guard cutter, unless that junior officer is a Sky Bronco alum. Many naval aviators find the demands and performance standards of flight school lofty and unreasonable, unless that student is a Sky Bronco alum. I would stack-up the WMU experience against that of ANY other institution in this country, bar none.

Every single faculty and staff member worked hard to make sure I had a quality education. In an uncertain industry where financial resources are scarce and job growth is inconsistent at best, WMU can be the gateway that every student needs if they are willing to scratch and claw and work their way through it. If you ever find yourself in Coast Guard City, USA you'll know where this Bronco stands. Just look for the Brown and Gold 'W'. We fly it high. We fly it proud. Go, Broncos, Go!"

LTJG KYLE JOHNSON, '09
Aviation Flight Science
United States Coast Guard

"My experience in the College of Aviation was essential to my current profession as a Captain for United Airlines. From the advanced aerodynamic courses taught by Tom Deckard, to the practical understanding of a jet engine under the watchful eye of Dr. Curt Swanson, every facet of flight was explored. My instructors took a personal interest in my career. For my flight training, I would like to personally thank the late, Pat Schiffer, and Ron Sackett, for their effort and interest in training me as a professional pilot. Many of their examples of professionalism carried over into my aviation career. I'd also like to acknowledge Larry Hoikka, head of aircraft maintenance, for keeping the WMU fleet well maintained, and Leisa Perry, flight scheduler, for helping us rearrange our flight training due to constant changes in the weather. I have many fond memories of all these individuals taking their personal time to help me while attending WMU and I would like to say, 'Thank You.'"

ED IVERSEN, '85
Aviation

"I wanted to extend my greatest congratulations to the College of Aviation! The accomplishments of this school are amazing, and it's even more amazing to see how it has grown even since I've graduated. The right leadership is in place to allow the college to continue to succeed, and I'm proud to call myself a Bronco for graduating from the College of Aviation. I still continue to come back to Kalamazoo and Battle Creek just to visit, and love being able to be an involved alumnus. Go Broncos!"

CHIP WASINSKY, '10
Aviation Science and Administration

"Happy 75th birthday WMU College of aviation! Here's to another 75 years of producing some of the finest aviators and aviation professionals out there in the business! Proud to say I'm a 'flying Bronco!'"

SEAN EGGLESFIELD, '00
Southwest Airlines

"What WMU did was give me a good technical education considerably deeper than the standard course of study for the Airframe and Powerplant License. The additional classes in Metallurgy, Electronics, Fuels and Lubricants, and even a general education in mass media and foreign language has put me in a position for greater professional growth in what is becoming a more international market. One class I recall was ET 418 System Reliability and Maintainability. At the time it didn't seem very relevant to what I'd be doing as an aircraft technician. However, 26 years later I find myself writing System Safety Assessments for equipment installations and now realize the value of the class. My one piece of advice to anybody receiving an education is to never discount the value of a class/subject that you feel has little to do with your chosen field. Learn as much as you can from your entire university experience."

DONALD H. SHAFFER, '88
Aviation Maintenance & Management (with A/P)
Certification Engineer, Duncan Aviation


N 2799

"My education at WMU was a great experience and that education has provided me a broad knowledge base to draw from throughout my career. When I began classes at WMU, my view of aviation was very narrow - there were pilots, mechanics, and management folks that ran companies. As my education progressed and I took further classes, both aviation and (seemingly) non-aviation related, my very narrow view of aviation suddenly opened up to reveal the incredible array of careers that were available. Throughout my aviation career, I've been fortunate to work in a variety of areas - maintenance, flight-related, engineering, business, etc - with some truly remarkable people. Little did I know as a student how each of those positions would require the skills I learned in each of my classes. My training and education at WMU provided me with a skill set to be successful in each of my job occupations, and to this day I find myself using knowledge gained from one of the classes I took, whether it be Aircraft Structures or Interpersonal Communication.

If I had one piece of advice to give to students it's be patient and, to borrow a phrase from the military, 'trust the process' - there's a reason you're sitting in those required classes that you think you're never going to use after graduation.

You're not simply studying at WMU to become a pilot, or maintenance tech, or business person. You're studying to become a Professional in an international industry."

DAVE SANDEL, '95
Aviation Technology and Operations, Technical Management
Commercial Helicopter rating through WMU, 2001
Certification Specialist, Duncan Aviation Battle Creek

"Throughout my career in business aviation, I have met many people, from all facets of the industry, and occasionally a fellow graduate. Whether it is a career fair, a convention or just chatting with an operator, the topic of 'where you got your start' often comes up. When I mention my education at Western Michigan University, the common response is a nod of approval and something like 'I've heard good things WMU' or 'I know so and so who graduated from there' and even 'Oh...I know about Western, they're pilots are always hired first'. Seeing WMU held in such high regard throughout our industry is awesome and makes me proud to be a Bronco!"

JEFF SCHIPPER, '88
Project Manager, Duncan Aviation

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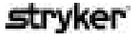

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“

To most people, the sky is the limit.
To those who love aviation, the sky is home.

ANONYMOUS

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